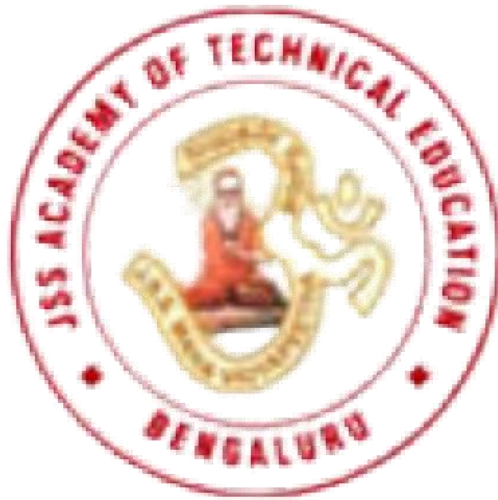# JSS MAHAVIDYAPEETHA

JSS ACADEMY OF TECHNICAL EDUCATION, BENGALURU-60

Affiliated to Visvesvaraya Technological University, Belagavi, Karnataka, INDIA
Approved by All India Council for Technical Education, NewDelhi
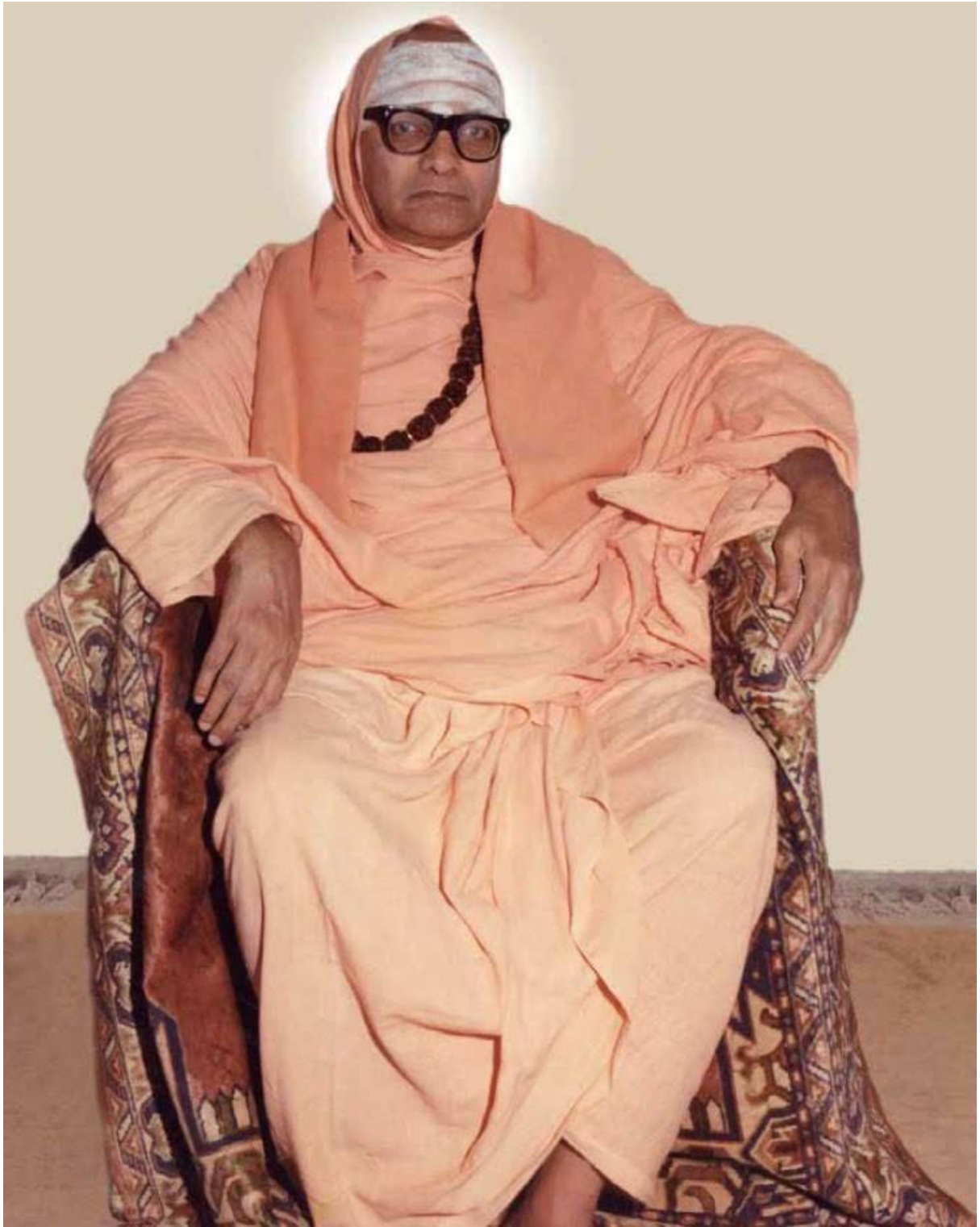**UG programs accredited by NBA:ECE,CSE,ISE,CIVIL,ME,E&IE**

ANNUALREPORT 2022-23

Contents

Founder President of JSS Mahavidyapeetha

HisHolinessJagadguruDr.SriShivarathriRajendraMahaswamiji

His Holiness Jagadguru Dr. Sri Shivarathri Rajendra Mahaswamiji, the 23rdPontiff of Sri JagadguruVeerasimhasana Mahasamsthana Math, known as Sri Suttur Math, inherited the legacy of the 10centuryoldSrimathatanearlyage.Hewasbornin1916andascended thePeethain1928whenhe

was hardly twelve. He shared the responsibilities with his senior, Jagadguru Pattada ShivarathriMahaswamigalu. Ever since he had been at the helm of affairs of the Math for more than half acentury.Everystephetookforwardwas insearchof newareasofservice.

He was a patron of arts and literature and a scholar in Kannada and Sanskrit. He sacrificed hiseducational careerto provide succourto the helplesspoor. The burningdesire toassuagetheeducational needs of hundreds rural children, he started the first free hostel at Mysore in 1941. Thusbegan his journey of socio- economic transformation of the region with the establishment of Schools,Colleges and Sanskrit Patashalas in and around Mysore . A single minded dedication to a task aimedat the welfare of all alonegoaded himto trudge a path of sacrifice. The incredible divine gracecoupledwithintenseandsustainedfocusresultedinmaterialisationofhisgreatdreamsofestablishing free schools and hostels, professional colleges, centres of art, music, and literature etc,.Jagadguru Dr. Sri Shivarathri Rajendra Swamiji had a strong vision of starting educational institutionsin rural areas considering the hardship of studentscoming to cities seeking education. In order tomake this possible, he started the Jagadguru Sri Shivarathreeshwara Mahavidyapeetha in 1954, laterit was registered under the Societies' Registration Act in 1962. Under the untiring efforts of Dr. SriShivarathri Rajendra Mahaswamiji, the Vidyapeetha has witnessed enormous growth in the field ofeducation.Thousandsofchildren,menandwomenfoundsolaceunderhisboundlesscompassion.

Though the earthly sojourn of His Holiness came to end in 1986, his indomitable spirit lingers throughover350institutionsacrossthecontinents.ThecentenarybirthanniversaryofJagadguruDr.Shivarathri Rajendra Mahaswamiji was celebrated in 2015 by the devotees all over the world as atoken of expressing the respect and gratitude to the ever-loving spirit of this Noble Saint and byfollowinghisprincipleof`workis worship'.

HisHolinessJagadguruSriShivarathriDeshikendraMahaswamiji

His Holiness Jagadguru Sri Shivarathri Deshikendra Mahaswamiji, the present pontiff and the 24th Peethadhyaksha of Sri Jagadguru Veerasimhasana Suttur Math, assumed the Peetha in 1986 at theyoung age of 29 years. He had his spiritual training under the guidance of his illustrious predecessorHis Holiness Jagadguru Dr Sri Shivarathri Rajendra Mahaswamiji the founder president of the

JSSMahavidyapeetha,aneducationalandculturalorganizationdedicatedtotheidealofprovidingeducationto thevillages ofKarnataka.

His Holiness Jagadguru Sri Shivarathri Deshikendra Mahaswamiji, the Honourable Chancellor of JSSAcademy of Higher Education & Research - a visionary, endeavoured not only to cross the Vindhyasand establish engineering colleges, schools, etc at NOIDA (UP) and the JSS Spiritual and CulturalCentre at New Delhi but also travelled beyond the shores of the country and established the presenceof the Math in USA, Mauritius and Dubai. His efforts to reach out to the core of the problems thatchallenge our society be it literacy, health care, employment or building values amongst the society islauded and recognised by one and all. It is His Vision that has taken the Deemed university to achievesignificant milestones in a short span of ten years and be recognised as one of the most progressiveuniversities inthefieldofHealth Sciences.

About JSS Mahavidyapeetha

The origin of JSS Mahavidyapeetha (JSSMVP), a formidable educational movement, can be traced tothe establishment of a small hostel in 1928 to cater to the accommodation needs of students pursuinghigherstudiesinMysore.HisHolinessJagadguruDr.SriShivarathriRajendraMahaswamijiestablish ed the Jagadguru Sri Shivarathreeshwara Mahavidyapeetha (JSSMVP) in 1954 and it wasregistered under the Societies' Registration Act 1960.Focusing on a purpose as expansive and yet asspecificasimprovingquality oflifethrough Human Development,the JSS Mahavidyapeethahasgrown from strength to strength. A long and healthy life, Education for all and a decent standard ofliving, the indicators of Human development, have been the underlying philosophy of Jagadguru SriVeerasimhasana Mahasamsthana Math, Suttur Srikshethra, for centuries. This is also the philosophyfor which the Mahavidyapeetha today stands for.Under theuntiring effortsof Jagadguru Dr.SriShivarathri Rajendra Mahaswamiji, the Mahavidyapeetha has witnessed enormous growth in the fieldof education and today has over 300 institutions under its fold, from kindergartens to postgraduatecentresandpostdoctoralresearchcateringtotheeducationalneedsofmorethan1,00,000stude nts.

The Mahavidyapeetha continues to play an important role in expanding the scope of its activities toseveralbranchesofknowledge,welfareandculture.Itseducationaleffortsspancrèchesfortoddlersof working rural women, schools to impart primary and secondary education in both Kannada andEnglish medium, Colleges, Polytechnics, Technical, Medicine, etc. For realizing its mission, it hasequipped itself with an extensive infrastructure and an army of dedicated and highly qualified humanresource. These institutions, located in strategic areas, serve a broad spectrum of society, fromvirtually remote tribal villages to metropolitan cities such as Bengaluru, Noida, New Delhi, Ooty, andCoimbatore,besidestheirpresenceinUnitedStates,MauritiusandDubai.

Apart fromformal education,theinitiativesstretchtointegrated rural developmentthrough trainingand empowering of rural folk, reaching out healthcare to people through modern and traditional Indiansystems of medicine, patronizing literary activities, visual arts, performing arts, restoration of templesandhistoricalmonuments.

About JSS Academy of Technical Education, Bengaluru

JSS Academy ofTechnical Education (JSSATE) was established in the year 1997 at Bangaloreand is under the umbrella of JSS Mahavidyapeetha, Mysore. JSSATE is the result of the vision of ourPresident, His Holiness Jagadguru Sri Shivarathri Deshikendra Mahaswamiji to proactively participateinestablishingaworldclassInstitutionforTechnicalEducation.TheCampusislocatedonasprawling 21.17 acres'land surroundedby lush green plantationon the South-Western edge ofBengaluru City. The institution is affiliated to Visvesvaraya Technological University (VTU), Belgaum,India.

AtpresentJSSATE,BengaluruhaseightUnderGraduateandtwoPostGraduateprogramsinEngineering along with an Under Graduate program in BSc. (Hons) and post Graduate program inBusiness Administration. All the Departments have been recognized as "research Centres" from VTU,Belagavi.Thetotalstrengthof students is more than3000.

JSSATE, Bengaluru has an excellent infrastructure with the state-of-the art equipment and machineryas laboratory facilities. The Institution has spacious classrooms and the laboratories. The wholebuilding is networked and has centralized browsing facility with 500 Mbps dedicated internet facility.TheentirecollegehasWi-Fifacility.

The Institute has highly qualified faculty. The Institute has initiated a number of multidisciplinary andmulti-institutional R&D programs with AICTE, DST and other Departments. Under the R & D activity,the Institute has taken up the design and fabrication of bio-diesel plant in collaborationwithanindustry and it is sponsored by Department of Science & Technology (DST), Government ofIndia.This was recognized as one of the best-completed projects and same is being replicated in differentstates.

The Institute has a centralized library with open access facility for students. The Institute Digital libraryhasonlineaccesstointernationaljournals.Bookbankfacilityisavailableforstudents.

Vision of the Institute

To be among the finest Institutions providing Engineering and Management Education empoweredwithresearch, innovation andentrepreneurship.

Mission of theInstitute

- StrivetowardsExcellenceinteaching–learningprocessandnurturepersonalitydevelopment.
- EncourageResearch,Innovation&Entrepreneurship.
- Traintoupholdhighestethicalstandardsinallactivities.

Quality Policy

- Achieve Excellence in Technical Education, Research and Consultancy through an OutcomeBasedEducation
- Focus on Continuous Improvement and Innovation by Benchmarking Against the Global BestPractices.

Statutory Approvals & Recognitions

- **Accreditation**

ThefollowingDepartmentsareaccreditedbyNationalBoardofAccreditation,NewDelhi,fortheperiodofthreeyears fromwitheffectivefrom01.07.2020 till30.06.2023

Sl. No.	Program
1	ComputerScienceandEngineering
2	InformationScienceandEngineering
3	ElectronicsandCommunicationEngineering
4	MechanicalEngineering
5	CivilEngineering

- **Ratings**

JSSAcademyofTechnicalEducation,Bengaluru,hasbeenassessedonQSIGAUGEMethodology1.2/1.3.byQSIGAUGEratingsystem.

- **NIRFRanking**

The National Institutional Ranking Framework (NIRF) has ranked theinstitutionin251-300bandamongengineeringcollegesin2020.

OrganizationalStructure

His Holiness MahaswamijiPres

GoverningCouncil

ExecutiveSecretary

→ ExecutiveSecretary-1

→ ExecutiveSecretary-2

Director

JointDirector

Principal

Dean- Academics

Dean-Research

Dean -Student welfare

HODs

Account

Training& Placement

Administrative officer

LibraryInfo.& Centre

Estateofficer

Faculty & TechnicalStaff

Admission Section

Examination Section

Establishment Section

Members of Board of Management

Sl.No.	Name	Designation
1	HisHolinessJagadguruSriShivarathri DeshikendraMahaswamijiPresident,JSSMahavidyapeetha,Mysuru	Chairman
2	JusticeDr.ShivarajVPatil Co-Chairman,JSSinstitutions,Bengaluru	Member
3	Dr.CGBetsurmath,KAS(Retd.) ExecutiveSecretary,JSSMahavidyapeetha,Mysuru	Member
4	Prof.M.H.Dhananjaya Advisor,TechnicalEducationDivision,JSSMVP,Mysuru	Member
5	Dr.HRMahadevaswamy JointDirector,TechnicalEducationDivision,JSSMahavidyapeetha,SJ CECampus,Mysuru	Member
6	SriHKShivananda,IAS(Ret d.)Retired.IASOfficer,Bengaluru	Member
7	Dr.SMJamadar,IAS(Retd.) FormerChairman,JSSTICE,Bengaluru	Member
8	Dr.B.G.Sangameshwara FormerVice-Chancellor,JSSScienceandTechnologyUniversity,Mysuru	Member
9	Prof.B.Gurumoorthy Chairman,CFPDM,IISc,Bengaluru	Member
10	Dr.ShyamVasudevaRao Industrialist,M/sForusHealthcarePvt.Ltd.Bengaluru	Member
11	DrHilarianPushparaj GeneralManager,M/sMindtreeTechnologies,Bengaluru	Member
12	SriSagarNidavani ExecutiveCouncilMember,VTU,Bengaluru	MemberVT UNominee
13	Dr.RSakthivel Director,SouthWestRegionalOfficer,AICTE,Bengaluru	Member,AICTE NomineeEX-Officio
14	Sri.HUTalawar DirectorofTechnicalEducation,GOK,Bengaluru	MemberDTE ,Ex-Offico
15	Dr.PoornimaN Associateprofessor,E&CDepartment,JSSATE,Bengaluru	MemberFaculty representative
16	Dr. Bhimasen SoragaonPrincipal,JSSATE,B engaluru	Member Secretary

Academics

The academic division steers the teaching programs within the institution. The profiles of thedivisionincludeadmissions,regulationofacademicprograms,strategicplanningforthenewacademicpro gramsand its implementation, arrangement of various meeting, academic collaboration includingsigningofMoU's.Theacademicsectionalsoconductsfacultyevaluationfortheirperformanceannual ly. Continual improvement of the faculty is ensured by participation of faculty members invarious seminars, workshops and symposia. Internal Quality Assurance Cell being an integral part ofthe academic teamensures implementation of quality parameter in every aspect of academics atJSSATEB. Extra & co-curricularactivities are organised and supervised by the academic team. Thestudent support and welfare along with thesupervision of the University level NSS activities are underthe purview of the division. Alumni engagementsand placement activities of the division carters to the post-educationalneedsandconnectivityofitsstudents.Thedivisionownstheresponsibilityofstrengtheninganddiv ersifyingtheacademicexposuretothestudentsthroughappointmentandplanning the of adjunct/visiting faculty visits. The onus of document and submissionof half yearly andannualreportofJSSATEis withthedivision.

Dr. Naveen N C
Dean(Academics)

NPTEL

- JSSATEBisrecognisedastheLocalChapterbySWAYAM-NPTEL.

SWAYAM or Study Webs of Active-Learning forYoung Aspiring Minds. SWAYAM is a programmeinitiated by Government of India and designed toachieve the three cardinal principles of EducationPolicy viz.,access,equityand quality.The objective of this effort is to take the bestteaching learning resources to all, including the mostdisadvantaged. SWAYAM seeks to bridge the digital divide for students who have hitherto remaineduntouched by the digital revolution and have not been able to join the mainstream of the knowledgeeconomy. National Programme on Technology Enhanced Learning (NPTEL) is a project of MHRDinitiatedbysevenIndianInstitutesofTechnology(Bombay,Delhi,Kanpur,Kharagpur,Madras,Guwah atiandRoorkee)alongwiththeIndianInstituteofScience,Bangalorein2003,toprovidequalityeducation toanyoneinterestedinlearning.

NPTEL local chapter was started in JSSATE, Bengaluru from 26thDecember 2016. As a source ofinformation and other than syllabus oriented, around 8GB of previous NPTEL course materialsismade available in the Digital Library. These materials are circulated it to its users as and whendemanded by them. This NPTEL local chapter centre is being coordinated by Dr. Dayananda P,Professor, Dept. of ISE as SPOC. IITM has declared JSSATEB-NPTEL chapter as one of the activelocalchapteramongstlocal chapters of SouthIndia.

CulturalCrew

JSS Academy of Technical Education, Bengaluru has been giving equal importance to both academic and other activities. Institute strongly believe that both curricular, co- curricular and cultural activities are equally important for the overall important for the overall development of students. To encourage the students to participate in different activities, the institution has created a platform called VERVE – a techno cultural fest. Under this platform college organize many technical and cultural activities every year. VERVE has created a brand name in and around Bengaluru and emerged as number one techno cultural fest among the technical institutions in Bengaluru.

VERVE-2023

Techno cultural fest - VERVE'23 was organized in the college from 8th to 10th of June 2023. The program was inaugurated on 8th June 23 at 4 PM by Sri MR. Shailendra Mruthyunjayappa, President and CEO, Fintellix, Bengaluru, and Kannada Cini Artist Sri. Ganesh Rao Theater and Cine Artist, Bengaluru, were the chief guests of the Inaugural function. The inauguration program has begun with the tradition of seeking the divine blessings through invocation by Ms. Meera of 4th Sem. ECE department.

Dr. Mahesh Kumar D, Dean of Students Welfare welcomed all the dignitaries present on the dias, staff members and students for the inaugural function. The fest was inaugurated by lighting of the lamp from all the dignitaries present on the dias. Ms. Rachana, Chief student coordinator, Dept. of IEM Dept. briefed about the evolvement of the name Verve, its objectives and activities conducted under Verve. Prof. H S Kavitha, Dept. of

ECE and also the cultural committe member of Verve'23 red the annual report of the academic year 2022-23. Eleven faculty members of our institution obtained their PhD degree from past academic year and all the awardees were felicitated by chief guests during the inaugural function. Mrs. Kavitha M , Assistant Professor of ECE Dept. presented the Ph.D awardees list during felicitation.

Dr. Bhimsen Sargaon Principal and President of the inaugural function mentioned that the fest is the platform for students to acquire and understand the different cultures and also to exhibit student talents and showcase their managing capabilities. Dr. Naveen N C, Dean Academics delivered the Vote of Thanks. Around 1000 students and staff members witnessed the program.

The inaugural function of Verve fest was followed by several competitions/events such as Western Dance Team competition, Eastern Dance Team competition, FIFA, Street play, Dance Battle, Quiz, That Antha Heli, ESCN, Meraki,Western dance home team performance,Eastern dance home team performance,Fashion Team performance and competition on Day-1.

Day - 2 events began Farewell Function to final year students and many events such as Photography, PUBG, Farewell photoshoot, Farewell followed by lunch, Solo Eastern Dance and Western Dance, Lemon & spoon (Male Teachers), Dumb Charades (Female Teachers), Rap battle & Beatbox battle, Shark Tank, Web the builder/ Pair coding , Hogathon, Artist. At the end DJ show by Savio Mullen and Jonas Monteiro.

Day-3 events such as Mini Football, Mini Cricket,Mr and Ms JSS,Valorant, Squid games, Basketball 3X3, Treasure Hunt/ Murder mystery, Stand up comedy , Voice Of Verve, Robotics event, Pre production for artist, Artist performance by Lagori band from Bengaluru, followed by Dhwani Jssate band performance.

Prior to the Verve fest, the institution conducted Marathon in the name of JSS Run on 4th June 2023 with a cause of wild life conservation as a routine activities from past several years. Around 800 participants registered for the run. Cash prize worth of Rs. 50,000/- was distributed to the winners of various categories.

During the Verve'23 fest, a total of 28 competative events were conducted over a span of 3 days. Around 500 students registered and participated for various events from 20 colleges in and around Bengaluru and won cash prize worth of around Rs.80,000/-. Most of the events were judged by our college faculty or Alumni, however to judge some events like Eastern Dance, Western dance, Voice of Verve and Mr. & Ms JSS, etc., judges were invited from outside. The Verve'23 was conducted over a span of 3 days with an expenditure of around Rs. 30,00,000/-. Around 3000 students witnessed the program which includes around 2000 students of our institution and 1000 from other institutions. The entire program was successfully conducted with the support of all the Students Core Committee members, department staffs and members of the Cultural Committee.

Social Outreach Program

National Service Scheme (NSS)

The National Service Scheme(NSS) is an Indian government-sponsored public service program conducted by the Department of Youth Affairs and Sports of the Government of India. Popularly known as NSS, the scheme was launched in Gandhiji's Centenary year, 1969. NSS (National Service Scheme) activity is one of the primary activities for social services and learning importance at the very young stage while students are graduating.

NSS unit in JSS Academy of Technical Education, Bengaluru is active since the inception of this institution. NSS unit of JSSATEB has conducted many social services namely Swatch Bharath Abhiyan, Blood Donation Camp, Preparation and Plantation of seed-balls, Special camp, Health check-up camp and Walk athontoraise awareness about drugs etc.

The NSS Unit and ISE department of JSSATE, Bengaluru, in association with Youth for Seva, organized an IQAC initiative orientation program " Chhote Scientist-an Outreach Activity " on 3rd August 2023 from 11.00 a.m. to 1.00 p.m. at Seminar Hall 1 of JSSATE, Bengaluru.

The NSS unit of JSSATE, Bengaluru organized an Environmental Awareness Rally on 27th May 2023 in the Banakshankari 6th Stage, 11th Block, Srinivaspura, Bengaluru.

The NSS unit and students of JSSATE, Bengaluru participated in the "Drug Awareness Walkathon", organized by the Department of Youth Empowerment and Sports, Government of Karnataka and State NSS Cell on 26th June 2023 at Vidhana Soudha, Bengaluru.
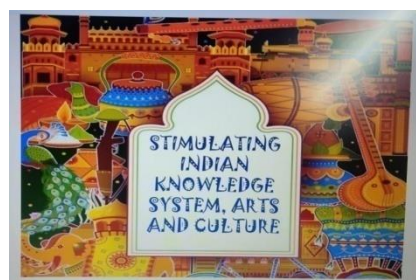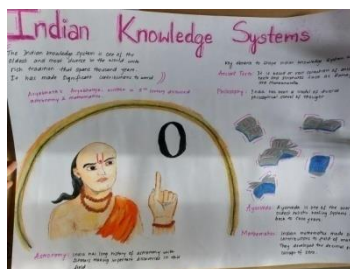
On the occasion of India being the president of G20 countries, the NSS Unit of JSSATE, Bengaluru, organized the "Exhibition Competition" on Indian Knowledge System and "Elocution Competition" on the topics Food Security, Clean and Renewable Energy Sources, Education and Skill Development, Global Health on 27th July 2023, at JSSATE, Bengaluru.

UNNAT BHARAT ABHIYAN

The conceptualization of Unnat Bharat Abhiyan (UBA) started with the initiative of a group of dedicated faculty members of Indian Institute of Technology Delhi working for long in the area of rural development and appropriate technology. The concept was nurtured through wide consultation with the actively involved people in rural development viz.,representatives of a number of technical institutions, Coordinators of Rural Technology Action Group, Voluntary organizations and Government agencies, etc. during anational workshop held at IIT Delhi in Sept. 2014. The program was formally launched by the Ministry of Education in presence of The President of India on 11th Nov. 2014. People can participate in UBA in any of the capacities such as a prospective Mentoring Institute, a Participating Institute, as a Subject Expert, as a Voluntary Organization, as a Developmental Agency, as a Philanthropist or a CSR Promoter,as NSS Member,As an Enthusiastic Volunteer,etc.based on the present status,competence and interest of the individual. JSSATE, Bengaluru wass elected as a Participating Institute from UBA in the academic year 2018-19.JSSATEB has adopted 05 villages under UBA (Bettanapalya, Bheemanakuppe, Maragondanahalli, Ramohalli, Challaghatta).

Youth Red Cross

The Youth Red Cross (YRC) is a most important constituent of its mother organization Indian Red Cross Society. YRC aim sat inculcating the 7 fundamental principles of the Red Cross movement viz., Humanity, Impartiality, Neutrality, Independence, Voluntary Service, Unity and Universality. The Youth Red Cross is organized with a view to develop and deploy student youth resource for working towards these principles. JSS Academy of Technical Education, Bengaluru has been affiliated to the Youth Red Cross Wing of the Indian Red Cross Society (Karnataka State Branch) Bengaluru in terms of Government of Karnataka, Department of Higher Education. Vide Order No: ED 38 Vividha, 2016 dated:17/06/2016. The YRC of JSSATEB organized Blood Donation Camps in collaboration with NSS unit of the institution.

DATTI AWARDS

To encourage and support the meritorious and economically weak students, many donors came forward and deposited some corpus amount in JSS Mahavidyapeeta, Mysuru. The interest earned by the deposited amount is being distributed to the students every year.

1. **Smt. Suvarnamma and Shri ANVishvesvarayya Datti award**

This award was initiated by Sri. A N Vishvesvarayya from the academic year 2013-14. A corpus amount of Rs.12 lakhs, depositedto JSS Mahavidyapeetha, Mysuru.The interest earned every year by the deposited amount will be paid to 5 students. Students (four girl

students and one boy student) will be identified for this award based on their family annual income and individuals'meritin12th standard. A committee will be formed by the institution to identify the deserving students for the award and the amount will be given to the students during the month of May.

2. Sri Siddappa Siddalingappa Dattiaward

This award was initiated by Prof. SSiddappa (Retd. Professor, Dept.of Civil Engg.,UVCE, Bengaluru) in the name of his father Sri Siddalingappa during the academic year 2001-02. A corpusamount of Rs. 35,000/- was deposited to JSS Mahavidyapeetha, Mysuru. The interest earned every year will be used to honour two topper formers in eighth semester University examinations.

3. Sree Shivarathrishwara Datti award

This award was initiated by Dr. Mrityunjaya V. Latte, (Principal, JSSATE, Bengaluru) and Dr. A M Shivakumar (Former Administrative Officer, JSSATE, Bengaluru) from the academic year 2013-14.Two top performers will be considered for this Datti award based on the average highest marks scored in the two semesters during first year. A corpus amount of Rs. 50,000/- was deposited to JSS Mahavidyapeetha, Mysuru and the interest earned every year by this amount will be given for two meritorious students.

Student Club

Student volunteers of JSS Academy of Technical Education, Bengaluru on their own initiation started YODHA (The Warrior Within In) on 24th September 2013 to demonstrate their social awareness skill and help the needy one. Yodha implies a warrior. A fighter, Not to fight battles, not to wage wars but to bring peace to their rational society of ours. Each one of us desperately wants a change in the way our society works. Every one of us are longing for a fresh breath of air. As the saying goes, "If you want change, then, be the change", it is absolutely pointless and inappropriate to wait for something drastic to suddenly happen. It is our nation. Our India. We are the youth, the people responsible tomake the drastic change a real thing. Realising our responsibility towards our country, we started with our small contributions. We thought we should start with the place we spend most of our time. Yes! Our college.

Training and Placement

JSS Academy of Technical Education, Bengaluru always feel proud and privileged to provide quality Engineering and Management students with highest ethical standards and contribute to the nation's growth. The institute has successfully placed the students in various companies in different sectors. The institute has observed substantial growth in number of opportunities provided for the students in the field of Engineering and Management. The Placement Department tries to Bridge the gap between Institution and industries by analyzing the industry trends and expectation. The leading companies in from various sectors are invited to the campus and ensure that all the Objectives of Department.

Department of Sports

JSS Academy of Technical Education, Bengaluru has been giving equa limportance to both Curricular, Co-curricular and extra curricular activities.To encourage the students to participate in sports activities, the institute has created all the necessary sports facilities. Department of Physical Education and sports was started in the year 1997 aims at all round development of the students' personality through sports activities. Our college Sports department has been organizing many sports events such as VTU Inter collegiate, Bengaluru

South Zone Cricket Tournaments, Inter-zone sports events. Karnataka State Cricket Association (KSCA), Bangalore has recognized our college cricket ground as one of the best turf cricket grounds in Karnataka. Our college sports department has been conducting series of cricket matches which include Division matches, Women's' Matches, Zonal Matches for Under14, 16, 19, etc. throughout the year in association with KSCA.

Staff Details

SI.No.	Name	Qualification	Experience
1	Mr.PraveenKumarUB SportsSecretary	B.E., M.Tech.,(PhD)	08Years
2	Mr.ShivanandaHB PhysicalEducationInstructorgrade-1	M.PEd., M.Phil.	17Years
3	Mr.NandeeshGSports/Technic alHelperPh.	ITI (Diploma)	04Years

List of events organized by Physical Education and Sports Department for the Academic year 2022-23

SI No	Date	Name of the Event
1	29th to 30th July 2022	22rdVTU Inter Collegiate Single Zone Men &Women youth festival held at BMSCE, Bengaluru
2	15/08/2022	Independence day celebration
3	3rd& 4th November 2022	VTU Inter Collegiate Bengaluru South Division Kabaddi Tournament for (Men), held at KSSCEM, Bengaluru
4	4th& 5th November 2022	VTU Inter Collegiate Bengaluru South Division Table Tennis Tournament for (Men & Women), held at DSATEM, Bengaluru
5	4th& 5th November 2022	VTU Inter Collegiate Bengaluru South Division Shuttle Badminton tournament(men and women), held at SJBIT Bengaluru
6	11th&12th November 2022	**Hosting in our cllege VTU Inter Collegiate BengaluruDivision Men Lawn Tennis tournament, at JSSATE Bengaluru**
7	17th& 18th November 2022	VTU Inter Collegiate Bengaluru South Division Volley Ball Tournament for (Men), held at RVCE
8	23rdNovember 2022	VTU Inter Collegiate Bengaluru Division Volley Ball Tournament for (Women), held at BMSSA,Yelahanka Bengaluru
9	24thNovember 2022	VTU Inter Collegiate State Level Selection (M&W) Trails conducted by BMSCE Bengaluru Shooting, Karate, Kick Boxing, Squash Racket, Fencing, Cycling, Woshu, Skating, Rowing Malkamba & Gymnastic.
10	**28th& 29th November 2022**	**Hosting in our cllege VTU Inter Collegiate Bengaluru South Division Men Basket Ball Tournament, at JSSATE Bengaluru.**
11	28th to 30th November 2022	JSS Inter Institutions Sports Meet held at Sree Suttur Kshetra, Suttur.
12	5th&6 th December 2022	VTU Inter Collegiate Bengaluru Division Women Basket Ball Tournament, at DR.AIT, Bengaluru**.**
13	5th& 6th December 2022	VTU Inter Collegiate Bengaluru South Division Men Foot Ball Tournament, at RNSIT, Bengaluru.
14	9th& 10th December 2022	VTU Inter Collegiate State Level (M&W) Yoga competition at BCET, Sravanabelagola.
15	27thJanuary 2023	VTU Inter Collegiate State Level Hand ball (M) Selection Trails conducted by BrindavanCollege of Engineering,Bagaluru, yelahanka, Bengaluru.
16	27th& 28thJanuary 2023	VTU Inter Collegiate State Level Cross Country Championship for (M&W) held at Sri Sai Ram College of Engineering Anekal,Bengaluru
17	10th& 11thMarch 2023	VTU Inter Collegiate Bengaluru South Division Men Hand Ball Tournament, at GAT, Bengaluru.
18	10th& 11thMarch 2023	VTU Inter Collegiate Bengaluru South Division Women Throw Ball Tournament, at GAT, Bengaluru.
19	9th TO 17thMarch 2023	VTU Inter Collegiate Bengaluru South Division Men Cricket Tournament, at DBIT, Bengaluru.

20	17th March 2023	VTU Inter Collegiate Bengaluru South Division Men KHO-KHO Tournament, at RVCE, Bengaluru.
21	18th &19th March 2023	State level Inter Collegiate YUVA KREEDOUTSAVA-2023 Venu VIDYA SHILPI ACADEMY JAKKURU Bengaluru
22	27th Marchto 4th April 2023	State level Inter Collegiate Cricket (M) Football (M) & Badminton (M &W Dubles) Tournament, Organaiged by RV University at RVCE Campus, Bengaluru.
23	1st to 5th April 2023	Representation of VTU University Shooting (Men) Team in All India Inter University Championship to be held at University of Swami Vivekanand Subhart University, Meerut from 5th to 9th April 2023
24	5th to 9th April 2023	Representation of VTU University Shooting (Women) Team in All India Inter University Championship to be held at University of Swami Vivekanand Subhart University, Meerut from 5th to 9th April 2023
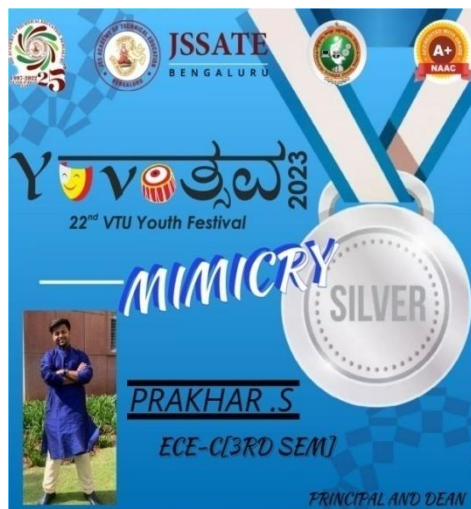
VTU Belgavi conducted its annual Cultural Fest 'Yuvotsava' at Nagurjana College of Engineering. There were events conducted in Theatre, Music Literature etc. Students of JSSATEB (43No's) enthusiastically participated in many of these events like One Act Play, Mime, Mimicry, Solo Instrumental(Percussion), On Spot Photography, Elocution, Cartooning, Folk Dance to name a few. The events were held between 28th March '23 and 01st April '23. Out of these events, our students won silver medals in Mimicry and Solo instrumentals(percussion).

A Two-day Sports event on "VTU South Zone Men & Women Table Tennis Tournament" was organized by Department of Physical Education & Sports, JSSATEB at our College premises on Wednesday, 12th July 2023 at JSS Academy of Technical Education, Bengaluru.

Indoor Shuttle badmintion

Shot Put

Prestigious Recruiters

Training & Development

The Training & Placement Cell at JSSATE, Bengaluru organizes the following training programs for the students;

- Aptitude related Analytical Skills for enhancing analytical skills of students.
- Soft skills are a quite essential qualification for professionals aspiring to move up the value chaine specially attitude, communication and presentation.
- Group Discussions are organized to promote skills of interaction in group and leadership styles.The company executives/ employers will be invited to share their valued expertise on various topics, work place situations with our students, current trends and future scenario.
- Mock Interview rounds will be conducted to build confidence and self-esteem in students toper form with ease in front of panel members during campus placements.
- Company Specific training programs will be conducted for all final year students on Aptitude related analytical skills, Group Discussion and Interview skills by Industry veterans just before the visit of MNCs.
- Eminent management personalities are invited to conduct workshops on Personality Development, Inter personal and Communication Skills, Time management, Memory Management etc.
- Participation of students in activities that provide them all round personal and professional growth will be promoted.
- T&P Cell will coordinate various activities/ organize programs such as Career Goal Setting/ Planning/ Mapping, Mock Interviews/ Interviewing Techniques, Group Discussions, Case Studies, Resume Writing Referral, Professional Portfolio Development, Dressing Sense, Business Etiquette and Technology Management.

Placement Details

Particulars	2018-19	2019-20	2020-21	2021-2022	2022-2023
No. of Companies visited till date	84	40	50	52	64
Total No. of Offers	410	349	409	767	642
No. of students with single Job offers	267	268	260	437	414
No. of students with 2 Job offers	143	81	146	330	228
Highest package offered with companies name	12 LPA M/S HSBC	43.17 LPA M/S Adobe	16 LPA M/S OneDirect	45 LPA M/S Amazon	21 LPA M/S Juspay
Lowest package offered with companies name	2.52 LPA M/S Mphasis	3.1 LPA M/S ATOS	2.64 LPA M/S Hiveminds	2.4 LPA M/S Nextfirst	2.4 LPA M/S Nextfirst
Average package offered	3.56 LPA	4.74 LPA	4.38 LPA	4.76 LPA	4.92 LPA

ALUMNI

JSSATEB Alumni Association is formed with the sole objective of bringing all the JSSATEBians on to a common platform for mutual benefits. The 1st batch of students have rolled out of the institution in 2001. Since then, over 8000 students are passed out of this institution and occupied various positions in the organizations all over the world. The association became active since 2010 under the stewardship of Principal Dr. Mrityunjaya V. Latte. The 1st alumni meet was held in 2012, Since then 3 meets were held. The 1st global alumni meet is scheduled in the month of June 2021. It is also proposed to start JSSATEB Alumni chapters in other parts of India & worldwide.

Office Bearers

Dr. Bhimasen Soragaon
Honorary President
Principal, JSSATE,
Bengaluru

Girish Venkatesh
President
Product Marketing Manager,
Mann & Hummel filter Pvt. Ltd.,
Bengaluru

B Vinod kumar
Vice President
Manager SCM & Purchase,
Gardner Aerospace Bengaluru
Pvt. Ltd., Bengaluru

Dr. Thejaswini P
Secretary
Assistant Professor,
Department of ECE
JSSATE, Bengaluru

Prashanth H R
Joint Secretary
Director,
Ace Multi Axes Systems
Ltd., Peenya Industrial
estate, Bengaluru

Vidya Singh
Joint Secretary,
Software Project Leader,
GE Health Care, Bengaluru

Bhanumathi K S
Treasurer
Assistant Professor,
Department of EIE, JSSATE,
Bengaluru

Supreeth M G
Member
Senior Consultant-
Talent Acquisition, CAP
GEMINI, Capgemini
Technology Services
Ltd, Bengaluru

Mr. Shashank
Member
Director, @ Webtrigon
Technologies Private
Limited, Bengaluru

Ravi Nagappa
Member
Finance Business Partner, NTT
DATA SERVICES, Tower E,
Global Village Tech park,
Mailasandra, Bengaluru

Mr. Varun U
Member
CEO,
Zysk Technologies Bengaluru

Siddharth Chaitanya
Member
Content Strategist
Consultant,
Unbox Experience,
Bengaluru

Mrs.Maithri
Member
Project leader, Maersk
Technologies, Bengaluru

Naveenkumar V
Member
Entrepreneur,
Klarheit Valuers & Engineering
services Pvt. Ltd., Bengaluru

Varun G R
Member
Project Engineer, BRYCON,
6915 W Frye Road, Chandler,
Arizona, USA

**Sanjeev Prasad
Shastry**
Member
Software Engineer,
Accenture Pvt. Ltd.,
Bengaluru

Vinay M E
Member
Application Development
Analyst,
Accenture Solutions,
Bengaluru

Varsha V Bhat
Member
Full Stack Developer,
CTS,#305, Balalji Hill top,
Kathriguppe, BSK 3rd Stage,
Bengaluru

Miss. Vybhavi J
Member
Engineer, ABB Ability
Innovation Centre,
Bengaluru

Contribution for conducting seminar

A3- Cloud Computing for Real -Time Applications

A2- Debunking Relationships

A1- College to Corporate Journey

A0- Alumni Association Member's Meet

SCHOLARSHIP

Scholarship facilities are available for students under various schemes depending upon merit as well as category. Students who are eligible to apply can contact college scholarship staff member in the accounts section. Also refer scholarship "Student Support portal" of our college website. Do not apply through private agencies. All scholarship information is available in the website of respective categories.

JSS ACADEMY OF TECHNICAL EDUCATION, BENGALURU

Affiliated to Visvesvaraya Technological University, Belagavi, Karnataka, INDIA
Approved by All India Council for Technical Education, New Delhi
UG programs accredited by NBA: ECE, CSE, ISE, CIVIL, ME, E & IE
Accredited by NAAC with A+ Grade

PMSSS Students Scholarship Details for the Academic year 2022-23

Sl.No	USN	NAME	BRACH	Year	SCHOLARSHIP AMOUNT
1	1JS18CS172	Syed Salik Hussain	CSE	Final Year	53460/-
2	1JS19CS015	Ajay Singh Raju	CSE	Final Year	84276/-
3	1JS19CS040	Ayush Sharma	CSE	Final Year	84276/-
4	1JS20CS414	Sofia Iqbal Khan	CSE	Final Year	80776/-
5	1JS19CV002	Abrar Hussain Ganaie	CV	Final Year	84276/-
6	1JS19CV060	Ubaid Yaqoob Mir	CV	Final Year	84276/-
7	1JS20CV409	Mohammad Waseem Malik	CV	Final Year	80776/-
8	1JS19EC026	Ather Ishaq	EC	Final Year	84276/-
9	1JS19IS032	Faarid Ahmad Zargar	ISE	Final Year	84276/-
10	1JS20ME600	Amir Akram	ME	Final Year	80776/-
11	1JS20CS093	Mueed U Din Tak	CSE	Third Year	87590/-
12	1JS20CV004	Arreb Ayoub	CV	Third Year	87590/-
13	1JS20CV051	Yawer Farooz	CV	Third Year	87590/-
14	1JS20EC003	Adil Fayaz	EC	Third Year	87590/-
15	1JS20EI008	Barket Hussain Dar	EIE	Third Year	87590/-
16	1JS20IS066	Nokhaiz Khan	ISE	Third Year	87590/-
17	1JS21ME413	Shahid Bilal	ME	Third Year	87590/-
18	1JS21CS184	Reetik Singh	CSE	Second Year	Not Yet Received
19	1JS22CV404	Saqib Mushtaq Bhat	CV	Second Year	99886/-
20	1JS22CV405	Ulfat Rashid	CV	Second Year	99886/-

JSSATEB Campus, Dr. Vishnuvardhan Road, Srinivasapura post, Bengaluru 560 060
Phone: 080-2861 2797/2565/1702, Fax: 080-2861 2706/2646, website: www. jssateb.ac.in

21	1JS22EC400	Arifa Javid	EC	Second Year	Not Yet Received
22	1JS21IS125	Aryan Anand	ISE	Second Year	80776/-
23	1JS21IS126	Haren Chopra	ISE	Second Year	80776/-
24	1JS22CS017	Aman Nisar	CSE	First Year	84686/-
25	1JS22CS128	Rohan Kumar	CSE	First Year	84686/-
26	1JS22CS163	Suraj Khar	CSE	First Year	84686/-
27	1JS22CS187	Vishav Partap Singh	CSE	First Year	84686/-
28	1JS22IS056	Kanav Padha	ISE	First Year	84686/-
29	1JS22IS075	Mohsin Ali	ISE	First Year	84686/-
Total					2284014/-

Signature of the Head of the Institute
Dr. Bhimasen Soragaon
PRINCIPAL
JSS Academy of Technical Educat
JSS ATE Campus,
Dr. Vishnuvardhan Road.
Bengaluru · 560 060

JSSATEB Campus, Dr. Vishnuvardhan Road, Srinivasapura post, Bengaluru 560 060
Phone: 080-2861 2797/2565/1702, Fax: 080-2861 2706/2646, website: www. jssateb.ac.in

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Farewell- 2023

JSS Academy of Technical Education, Bengaluru organized Farewell Program for the final year students of B.E., and M.Tech on 09.06.2023 in the college campus.

The inaugural function started at 11:30 AM, with an invocation song by Shravanthi and team followed by the welcome speech by Dr. Mahesh Kumar, Dean Student welfare and followed by lightning the lamp by the dignitaries. Chief guest Sri. Murlidhar S., Founder and CEO, LODESTAR- Career Guidance Services, Bengaluru, inaugurated Farewell – 2023 and addressed the gathering on this occasion.

The Chief Guest, Mr. Murlidhar S addressed the gathering regarding the biggest trends in AI intervention. He briefed how India by 2030 will be one of the top three economically developed countries in the world due to technological advancements. Students and youth play a game changing role in the development of the nation for which students need to build an attitude of humility and humbleness that will open their minds to new ideas and welcome suggestions to learn new things. Open attitude of learning along with diverse thoughts will keep students flexible and at the cutting edge. He advised students to understand their interests and develop their own personality. He also expressed about how important it is to discover the passion and being patient until the passion is executed to deliver productive results. The guest also reminded outgoing students about their responsibility towards society and their contribution to the society will make them more grounded and satisfied. He concluded his address by advising the graduating students that learning should never stop and the knowledge & skill can be acquired only through advanced technology & education and it plays a very important role in professional life.

DEPARTMENT OF CHEMISTRY

Events/Seminars/Technical talks organized

"National Science Fair-23" was conducted between 31st August to 2nd September 2023 and was inaugurated byPadmashri Dr. Ayyappan S, Chairman Karnataka Science & Technology Academy, Bengaluru, Chancellor Central Agricultural University, Impal, Former Secretary, DARE & Director General, ICAR; President, National Academy of Agricultural Sciences, New Delhi.National Science Fair-23 embody Exhibition, Technical Talk, Hands on activity on Science, Technology, Education, Arts and Maths, Sky watch and HAM radio

5th Popular Lecture series 22.07.2023 "Understanding and Managing Stress Effectively" byDr. Paulomi M Sudhir, Professor at Department of Clinical Psychology, NIMHANS, Bengaluru.

"National Science Week -2023" Celebration from 21.02.2023 to 03.03.2023 and expert talk by Shri Hemanth Kumar Reddy N, Group Director, Space Navigation Group, URSC/ISRO on 03.03.2023

An expert talk on "University of Miyazaki and the Indian Academic Fiduciary Outreach" by Dr. Harishkumar Madhyastha on 4th February 2023, 11:30 am

"One day Faculty Orientation Program for VTU affiliatedCollege Teachers on Revised Chemistry Syllabus-2022" was organised by the Department in Association withVisvesvaraya Technological University, Belagavi on 24.11.2022, Thursday at 10.00JSSATE, Bengaluru.

"National Science Fair-22" was conducted between 21st July 2022 to 23rd July 2022 and was inaugurated by Padmashree Dr. A. S. Kiran kumar, Former Chairman, Indian Space Research Organization, Bengaluru. National Science Fair-22 embody Exhibition, Technical Talk, Hands on activity on Science, Technology, Education, Arts and Maths, Sky watch and HAM radio

A Report of National Science Fair-2023

Level: National

Title: **National Science Fair-2023**

Category: Science exhibition followed by Technical Talks

Date: **31stAugust to2nd September 2023 (3 days)**

Target audience: High School, PUC, B.Sc, BE and MSc

No. of Resource Persons: 12

No. of Participants:405 Participants from different colleges and 1800 students visited from Various Institutions

Organized by: **Department of Chemistry**

Resource Person(s) with Designation:

1. Padmashri Dr. Ayyappan S, Chairman Karnataka Science & Technology Academy, Bengaluru, Chancellor Central Agricultural University, Impal, Former Secretary, DARE & Director General, ICAR; President, National Academy of Agricultural Sciences, New Delhi
2. Sri. M. N. Srinivasa, Group head FOIG, LEOS ISRO Bengaluru
3. Dr. H.B. Rudresh, MD, Vijaya Metal finishing, Bengaluru.
4. Mr. Rajeev Deekshit, MD, Pyro ecogreenTechnologioes PVT Ltd. Bengaluru
5. Dr.Shamsundar, former dean, JSS Hospital, Mysuru
6. Dr. S. T. Aruna, Scientist, CSIR-NAL, Bengaluru.
7. Mr. Abhishek A S, Founder, Gravity Science Foundation
8. Mr. Maheh MB, Secreatory Gravity Science Foundation
9. Mr. Smaraju, Member Gravity Science Foundation
10. Mr. Naveen A C, Member Gravity Science Foundation
11. Mr. Santhosh Kumar P, Member Gravity Science Foundation
12. Mr. Santhosh Kumar N, Member Gravity Science Foundation

Mode: Offline

Objective:

a. Encourage students to think critically, solve challenging problems, and develop skills such as oral communication, public speaking, research, teamwork, planning, self-sufficiency, goal setting

b. To provide a forum to nurture science and inventive interest from the surrounding environment and connecting new ideas to their existing ideas from materials and activities

c. To explore and encourage scientific and technological talent and creative thinking among children and inculcate in them a sense of pride in their talent

d. To developed an understanding about the role of science and technology to meet the needs of the society;

e. To analyze how science and technology have affected individuals, cultures and societies

f. To motivate the youth that science and technology are instrument for achieving self-reliance in socio-economic development; and

g. To encourage them as an architect of the nation and visualize future of the nation;

Report: Brief report on the respective sessions held on Day-1 and Day-2

Day-1: 31-08-2023

Inauguration: Padmashri Dr. Ayyappan S, Chairman Karnataka Science & Technology Academy, Bengaluru, Chancellor CAU, Impal, inaugurate the National Science Fair-2023. In the inaugural address sir mentioned the importance of science fairs, mentioned all the Indians as to remember the three important days i.e. 28th Feb-National Science Day is celebrated in India to mark the discovery of the Raman effect by Indian physicist Sir C. V. Raman . 11th May- tested the first indigenous aircraft celebrated as National Technology day and 23rd August Chandrayana-3 succefully landed on moon as 'National Space Day',also he mentioned the importance of science and technology and how it relates to the life.

Technical Talk:Mr. Srinivasa M N, Group Head, LEOS-ISRO, Bengaluru briefly explained about the designing of Chandrayana-3 launching vehicle and how it is controlled and orbital movement of the satellite. Also he mentioned, the Indian Space Research Organisation (ISRO) is all set to launch India's first-ever solar mission, Aditya-L1.

Inauguration of Science Exhibition:Prof. S. Ayyappan inaugurate the exhibition by cutting the tape, around 135 models are displayed in the exhibition.

Activity: Telescope installation and Sky watch by Mr. Abhishek, Founder Gravity Science Foundation and Mr. Somaraju, member of GSF.. Students from different institutions witnessed the sky watch programme.

Exhibition of Models: By Participants

Day-2: 01-09-2023

Technical Talk by Mr. Rajeev Deekshit, MD, Pyro ecogreenTechnologioes PVT Ltd. Bengaluru. Mr. Rajeev Deekshit explained the principles or policies of life like learn, adapt or implement and share the gained knowledge and briefly explained the use of green chemistry in waste management by taking suitable examples.

Special Lecture byDr.Shamsundar, former dean, JSS Hospital, Mysuru.Dr.Shamsundarexplained the recreate of health with different quotes and also briefly explain the different diseases and how to overcome with proper dieting and reducing the stress. Doctor also bring some real specimens and exhibited.

Activity: Hands on activity on Science, Technology, Education, Arts and Maths by Gravity Science Foundation.

Exhibition of Models: By Participants

Day-3: 02-09-2023

Special Lecture by Dr. S. T. Aruna, Scientist, CSIR-NAL, Bengaluru. Dr Aruna briefly explained about nano particle and its usages in ancient time in the name of "swarnaprasana" administered to babies in order to enhanace the functioning of brain. Also mentioned the role of nanoparticles in various fields.

Activity: HAM radio/Amature radio and water rocket by Mr. Maheh MB, Secreatory Gravity Science Foundation, Chamarajanagar.

Outcomes:

1. Develops the Scientific temper and scientific thinking among students.
2. Helps students to get the skills of science which includes observation, posing question, searching various resources of learning, planning investigations, hypothesis formulation and testing, using various tools for collecting, analyzing and interpreting data, supporting explanations with evidences, critically thinking to consider and evaluate alternative explanations, reflecting on their own thinking.
3. It develops scientific temper and literacy among the young minds. Students studying in High schools and PU colleges will visit to the facilities in JSSATEB and may help in future admissions.

A Report of 5th Popular Lecture-2023

Level: Institute

Title: "**Understanding and Managing Stress Effectively**"

Category: Seminar

Date: 22nd July.2023

Target audience: II semester BE students (Chemistry cycle)

No. of Resource Persons: 01

No. of Participants: 250

Organized by: Department of Chemistry

Resource Person with Designation:

Dr. Paulomi M Sudhir, Professor at Department of Clinical Psychology, NIMHANS, Bengaluru.
Mode: Offline

Objective:

Understand the nature of stress and its impact on health, behaviour and studies.

Report:

The Department of Chemistry had organized 5th Popular lecture on "Understanding and managing stress effectively" by Dr. Paulomi M Sudhir, Professor at Department Clinical Psychology, NIMHANS, Bengaluru. Dr. Roopashree B, HOD of Chemistry, welcomed the gathering. Miss Bindhu S, Assistant Professor, Dept. of Chemistry, introduced the speakerof the day. Dr. B Mahesh, Professor and Dean Research, addressed the gathering regarding the importance of having lecture on stress management. The speaker, Dr. Paulomi M Sudhir, described the importance of Stress managemnet. The speaker also emphasized various of types of stress which an individual will be facing in their day-to-day life and the importance of managing it for wellbeing. A good number of students and faculty members interacted with the speaker. Dr.Chamaraja N A, Asst Professor, Dept. of Chemistry, proposed vote of thanks, appreciated the insights and knowledge of the speaker on the Clinical psychology. The programme was coordinated by Miss Bindhu S, Asst Professor, Department of Chemistry.

Outcome: Students gained the knowledge on the importance of managing the stress

Level: National/International

Title: Centre for Nanoscience & Engineering lab (CeNSE), IISc Visit

Category: Lab Visit

Date: 31st March 2023 (1 day)

Target audience: 1st Year BE &B.Sc (H) Chemistry Major Students

No. of Participants: 53

Organized by: Department of Chemistry

Mode: Offline

Objective: To give the students a practical exposure

Report: In order to promote the research ambience and to give a practical exposure to 1st year students in the emerging technologies like Nanotechnology, the department of Chemistry had organized Research Lab visit to "Centre for Nano Science and Engineering (CeNSE)", Indian Institute of Science, Bangalore on 31st March 2023. In the CeNSE, the students explored central facilities – The National Nanofabrication Centre (NNfC) and the Micro and Nano Characterization facility (MNCF) which included electrical characterization facility, mechanical characterization facility, optical characterization facility.

The students were highly delighted to experience the real time research exposure of various processes in the fabrication unit and as well as the characterization process for Micro and Nano devices.

We would like to thank our beloved principal Dr.BhimasenSoragaon sir for providing all facility and support to conduct such events. We also thank our HOD Dr. Roopashree B for their constant support and encouragement.

We thank our beloved Joint Director - Technical Education Division at JSS Mahavidyapeetha sir for his guidance and motivation to conduct all such activities.

Outcome: The students had real time experience of the characterization tools which has been taught in the class.

A Report of National Science Week and Science Day-2023

Level: Institute

Title: "**National Science Week and Science Day-2023**"

Category: Competition for Students and Technical Talk

Date: 22nd February to 03rd March 2023

Target audience: First year BE Students

No. of Resource Persons: 01

No. of Participants: 250

Organized by: Department of Chemistry

Resource Person with Designation:

Shri Hemanth Kumar Reddy N, Group Director, Space Navigation Group, URSC/ISRO.

Mode: Offline

Objective:

- Promote scientific awareness to address global challenges and a platform to learn more about science and its impact on our daily lives.
- Encourage students to prove their talents, bring out their creativity, face challenges and overcome their weakness.
- Promote better understanding of concepts of science.

Report:

To honour the discovery of the Raman Effect by Nobel Laureate and renowned physicist, Dr. C.V. Raman, the Department of Chemistry had organised a week-long National Science Day celebration. This celebration included various competitions like Essay writing, Technical Talk, Science Quiz, and Chem-Rangoli from 22nd February 23 to 2nd March 23, with the culmination of these events on National Science Day-2023 on March 3rd, 2023. The Chief Guest of the program, Shri Hemanth Kumar Reddy N, Group Director, Space Navigation

Group, URSC/ISRO addressed students and emphasized the significance of science in addressing global issues for the welfare of humanity. He also gave a briefing on ISRO's satellite launches and how they can improve people's lives. The inaugural session commenced with invocation by Mr Shreyas P R and Ms Shreya and welcome address by Dr. Roopashree B, HOD of Chemistry. The Chief Guest was introduced by Mrs. Kathyayani D, andpresented an overview of the National Science Week celebrations. Following the felicitation of the chief guest, there was an event trailer, a fusion group dance, and the awarding of prizes to the winners. The Principal, Dr.BhimasenSoragaon, made the presidential remarks and proposed vote of thanks.

Outcome: Students participated in science competitions with enthusiasm and zeal. Created Awareness on latest advancements in science and technology for the global wellbeing through technical talk by resource person.

Inauguration Photos

A Report of Expert Talk-2023

Level: Institute

Title: "**University of Miyazaki and Indian academic Fiduciary Outreach**"

Category: Expert Talk

Date: 04th Feb.2023

Target audience: Faculties

No. of Resource Persons: 01

No. of Participants: **110**

Organized by: Department of Chemistry

Resource Person(s) with Designation:

Dr.Harish kumar Madhyastha, Faculty of Medicine, Department of Cardio vascular Physiology, University of Miyazaki, Japan.

Mode: Offline

Objective:

Collaborative and Trans- research with University of Miyazaki, Japan.

Report:

Dr. Roopashree B, HOD, Dept. Of Chemistry, welcome the gathering. Dr. Mahesh B, Professor & Dean Research, introduced the guest and also Dr. Mahesh B mentioned the research progress in terms of publications, patents and MOUs of JSSATE Bengaluru. The speaker, Dr.HarishkumarMadhyastha summarized the University of Miyazaki and its programmes. He also discussed potential channels for collaboration with the University of Miyazaki and opportunities to be explored for project proposal writing. A good number of faculty members interacted with the speaker. The programme was coordinated by Dr.Chamaraja N A, Asst Professor, Dept. of Chemistry.

Outcome: It provides a platformto discuss about collaborative research with University of Miyazaki, Japan.
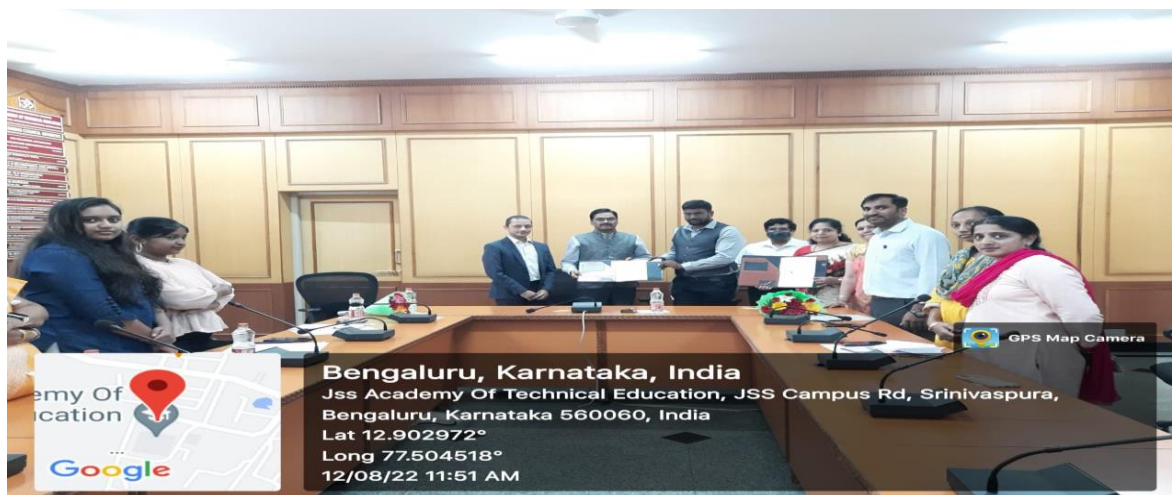
INFORMATION SCIENCE AND ENGINEERING

MOU with CipherAce

The MoU signing ceremony between M/s CipherACE Technologies Pvt. Ltd. and JSS Academy of Technology, Bengaluru was held on 12-8-2022 at JSSATEB in the presence of Dr. Rekha P M, Professor and Head, Dept. of ISE, Mr. Kiran Kannan Mohan, CEO, Mr. PramodShenthan, Ms. Ashitha R, Ms. Nithyashree V and Divya D from M/sCipherACE Technologies Pvt. Ltd. The faculties of the Dept. of ISE were also present. Dr. Rekha P M welcomed the gathering.

Dr. Nagamani N P, briefed about the college and the Department.Mr. Kiran Kannan Mohan briefed about the company, their clients and their various products.

The MoU was signed by Mr. Kiran Kannan Mohan, CEO, M/s.CipherACE Technologies Pvt. Ltd and Dr. Bhimasen Soragaon, Principal, JSSATE, Bengaluru. The MoU was signed in the presence of Dr. D V Ashoka, Dean Research, Dr. Rekha P M, HOD, the M/s. CipherACE team members and faculty of ISE Department. All the faculty of ISE gave a brief introduction about their research and area of expertise.Principal, HOD and Mr. Kiran Kannan Mohan discussed about the roadmap between JSS and M/s. CipherACE.

ISRO Industrial Visit

The Industrial Visit was organised by Department of Information Science and Engineering, JSSATEB. The visit was to U.R.Rao Satellite Center (URSC) in Indian Space Research Organisation, Bangalore. A batch of 53 students of fourth semester ISE both A and B section were handpicked. The selection of students was based on previous semester results. The visit was scheduled on 17th August 2022 afternoon 2.00pm. The College bus was organised for transportation purpose. At the U.R.Rao Satellite Centre, the students were visited the exhibition, which demonstrated when and how ISRO was started, the Senior Scientists and chairpersons who worked for ISRO. The exhibition also showed the various milestones and major projects taken down in ISRO. Cameras, mobile phones and smart watches were not allowed inside the exhibition hall. Dr. Srinivas.H.L, A senior scientists working in ISRO showed a small video of satellites are launched. He also showed an ongoing work of the satellite manufacturing in vaccum room.Dr.Srinivas.H.L, also explained students about the PSLV rocket, how it carriers rocket to the space. He also said about the three main types of satellite- one for weather forecasting purpose, second for communication purpose and the third for research purpose. Various satellites launched by ISRO in these three categories were also explained in detail. The upcoming projects of ISRO were also explained. At the end Dr. Srinivas.H.L motivated students to join ISRO by qualifying the entrance test after

their graduation. He also explained the various benefits given by the central government for ISRO officials. This talk and industrial visit motivated students to study hard and achieve their desired goals.

Interdisciplinary Innovative Open Source Project Contest on "Application Development Using Arduino IDE and Node MCU"

Project Contest on **" Application Development Using Arduino IDE and Node MCU "** was organized by Department of Information Science & Engineering & Head of the Department Dr. Rekha P M, JSSATE, Bangalore for 4th semester students of ISE on 20th August 2022. Resource person was Mr.Chethan C R ,Director of Tekatron IT Solutions, Bangalore.Program started at 10:00am in offline mode at CADD Lab A219. Dr. D V Ashoka, Professor, ISE, and Dr Gowreesh S ,Associate Professor, Mechanical, welcomed the resource person and students and also introduced the resource person to the gathering. More than 100 students of 4th semester of Information Science & Engineering were present. Speaker Mr.Chethan C R sir, first introduced him to the students and also gave a brief introduction about Tekatron IT Solutions. Also he highlighted the contents of the hands-on session. Tekatron IT Solutions is a premier hardware engineering chip level, PCB Designing, embedded training company.

The Resource person also gave insight on usage of Arduino IDE with examples of Bluetooth, IR sensors and led working using the Arduino board. Students were made to form a groups and each group was given with the hardware components like Arduino board, LED, IR sensors, temperature sensors. Each student had installed Arduino IDE in laptops and programmed all the sensors and developed an application. After the session Students got clarified their doubts and gave their valuable feedback on the entire session. The session ended with a vote of thanks by Mrs. Punitha M,Assistant Professor ISE, to Mr.Chethan C R for taking the time out to educate the students on providing the tips for Arduino Programming. It was an interactive and motivational session which gave an insight on Embedded Programming. Dr D V Ashoka also thanked the Event coordinators Mrs Punitha M, for making the event successful.
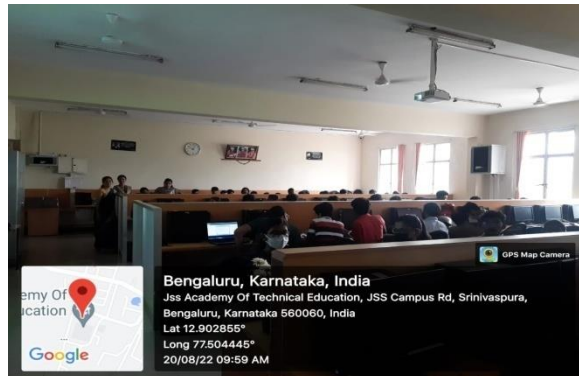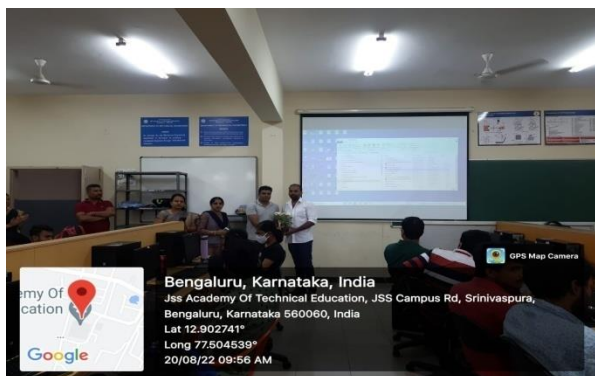
Inauguration of Student's Chapter Women in Big Data

The MoU Signing Ceremony of Women in Big Data, India Foundation was organised by Department of Information Science and Engineering and Department of CSE(AI&ML) JSSATEB on 23rd August 2022. The event was conducted from 10.00am to 11.00am at seminar hall 1. The event is organised in commemoration of 107th Jayanthi Celebration of RajaGuruTilaka Dr.Sri. Sri. Shivaratri Rajendra Mahaswamiji and silver jubilee celebration of JSS Academy of Technical Education Bangalore. The session was chaired by Miss Sowmya Monu, Co-Director WiBD, India, Dr. Bhimasen Soragaon Principal, Dr.D.V.Ashoka, In charge HoD, Dept of ISE and Dr.Anil.B.C, HoD CSE(AI&ML).

Shravathi.A fouth sem ISE student delivered the master of ceremony. Dr. Nethravathi. B, associate professor dept of ISE welcomed all the dignitaries. Dr.D.V.Ashoka delivered a short speech about JSSATEB and about ISE department. Dr. Bhimasen Soragaon delivered the presidential address. The Chief guest Miss Sowmya Moni spoke a few words about WiBD. MoU signing ceremony was conducted in presence of the chief guest. Mrs. Nagashree.S. Assistant Professor department of ISE introduced the student executive committee.

SDP on Fun with C

Student Development Program on "Fun with C" was organized by Department of Information Science and Engineering from 17th Oct to 21st Oct 2022 (1 week). The resource persons were . Dr. Nagamani N Purohit, Assco. Prof., ISE department, Dr. Nethravathi B, Assco. Prof., ISE department, Mrs. Sudha P R, Assist. Prof., ISE department. The program started at 10.00 AM, Dr. Rekha P M , HOD, ISE Department welcomed all. 50 students from Class 2nd A sec and B sec of Information science& Engg., department were present. It helped the students to understand the concept of C Programming. Dr. Nethravathi B briefly explained about the

importance of C language, applications of C, Advantages and disadvantages, challenges. Data Types & Operators are discussed with Quiz activity. Dr. Nagamani N Purohit discussed about Array & String Handling, Pointers with real time examples. Mrs. P R Sudha discussed about Flow Control Statements , Functions, Structures and Unions with real time examples.

Activities like quiz, Debate, Dum charades, Pick and speak, Debugging, Coding were conducted each day, where students were activily participated. Prizes were distributed to the winners. All the designed activities were supporting to build their overall personality development.

Feed back: Students expressed that they enjoyed the complete course saying the tittle of the SDP is very much appropriate.

The program ended by Vote of Thanks by Dr. Nagamani N Purohit .

CCIP International Conference

With the blessings of His Holiness the inauguration of the "FOURTH INTERNATIONAL CONFERENCE ON COGNITIVE COMPUTING AND INFORMATION PROCESSING CCIP-2022" was scheduled on 23rd December 2022 at seminar hall 1 of JSSATEB campus. The IEEE International Conference was organized by the Department of Information Science & Engineering and Computer Science & Engineering (AI & ML). The Chief guest of the Inauguration was Prof. S. S. Iyengar, Distinguished Professor, Florida International University (FIU), Miami, Dr. Deepa Shenoy,Chair, IEEE BS, UVCE, Bengaluru, Dr. Aloknath De, Corporate Vice President, M/s. Samsung Electronics, Guest of Honor was Dr. H.R. Mahadevaswamy, Joint Director, Technical Education Division, JSS MahavidyaPeeta, Mysuru and Mr. Gururaja Yellapur, Vice President, M/s. Omega HMS, Presided by Dr. Bhimasen Soragaon Principal, JSSATE, Bangalore. Inauguration started with the invocation song by Shree Raksha, student from Fifth Semester ISE. Dr.Dayananda P, Professor, ISE department, JSSATEB welcomed the gathering, followed with Lightening the lamp by the dignitaries, Dr. Rekha P.M, Professor & HOD, ISE Department JSSATEB briefed about the objectives and outcomes of the Conference. InauguralAddress by Chief Guest Prof. S. S. Iyengar, Book of Abstract was released by the Dignitaries on the dias. Followed with Address by Dr. Alokanath De, Dr. Deepa Shenaoy, Mr. Gururaj Yellapur, Address by Guest of Honor, Dr. H R Mahadevaswamy. The Presidential address was delivered by Dr. Bhimasen Soragaon Principal, JSSATE, Bangalore. Vote of thanks was delivered by Dr.AnilB.C, Associate Professor and Head of Department of Artificial Intelligence and Machine Learning. Principal of the college felicitated all the Guests.

Cyber security Awareness Session

As per the instructions of the Principal, the cyber security awareness session was organized at the institute level for all the students of 3rd year on Jan 12th , 2023 at seminar hall - 1,Academic Block -A in association with National Digital Library Club. Students from the departments of CSE, ISE, EC, E&I, BSc participated in the session. Welcome speech was given by Dr. Sowmya K.N, Associate Professor, Dept of ISE. Dr. Sowmya K N introduced the resource person, Mr. AMIT SUBHANJE, cyber security auditor at GE.

Mr. Amit gave a brief idea about Risk, its assessment parameters, scope of risk, examples and categories of risk involved in the cyber world. He also told the students about Do's and don'ts that they need to be aware of while doing digital transactions and using social media. He explained the importance of a clean desk policy and how to do it in the workplace to prevent data loss or breach. Students were enthusiastic in the session and were found to be interactive.

Vote of thanks was presented by the coordinator and an appreciation note with a momento was given by Dr. Rekha P.M, IQAC Coordinator, HoD, Department of ISE for the resource person. She thanked the resource person for spearing his valuable time and enriching the audience. A quiz was conducted for the participants and a cash prize of 200 rs is given to the same.

NCAIT 2023

Like every year, NCAIT 2023 provided a forum for presentation of new research results and demonstration of new systems and techniques in the broad field of information technology and management.

NCAIT has been established over the recent 9 years as a flagship conference of the department of Information Science and Engineering, JSS Academy of Technical Education Bangalore, under the umbrella of the department forum Samyog where academicians, students, researchers and industry professionals from around the state and nation can present their research results and share ideals.

The main objectives of NCAIT 2023 are:

* To encourage favorable exposure to the students and researchers in the early stages of their careers,NCAIT 2023 conference program will reflect the wide spectrum of research topics in Information Technology building bridges between various research fields. On May 3rd 2023 in the inaugural function started with an inauguration song by Sriraksha student of 6th semester ISE, welcome speech by Dr. PM Reka Professor and Head, Department of ISE & IQAC coordinator. Dr.DV Ashoka, Presented a detailed report on NCAIT 2023. Mr. Sharan Kantikar Head R & D / Special Projects, Tietoevry, Digital Innovation, Bangalore, India,   delivered a keynote speech. Special Address by the Guest of Honor Dr. H R Mahadevaswamy Joint Director, TED, JSS Mahavidyapeetha, Mysuru and Presidential address by Dr. Bhimasen Soragaon, Principal JSSATE, BengaluruFurther conference will address by practical exposure in the form of specialized sessions, 40-paper presentation and 6-poster presentations. Selected presented papers will be published in the JSS Journal of Scientific studies.The inaugural function concluded by the vote of thanks by Dr. Nagamani P, Associate Professor, Department of ISE. The master of ceremony of this function by Shravanti.

One-week Online ICT based Short Term Course on " IoT Basics"

An IQAC initiative, Short Term Course on "IoT Basics" was organized by National Institute of Technical Teachers training and Research (NITTTR) Chandigarh with department of Information Science and Engg., JSSATEB as Remote Centre from 24.04.2023 to 28.04.2023. The resource persons were Dr. Maitreyee Dutta, Professor& Head, Dept. of IMEE Dean of Academics, R&D, NITTTR Chandigarh. Dr. Sandeep Singh Gill, Professor, NITTTR, Chandigarh, Dr. Jagriti Saini, Founder & Owner, Eternal RESTEM, Sunder Nagar, HP, Mr. Kamal Katyal, NITTTR, Chandigarh, Mrs. Manisha Malik, NITTTR, Chandigarh, Dr. Gaurav Kumar, Director, Magma Research Consultancy Ltd.. The program started at 9.30 AM online mode with Google Meeting Link: meet.google.com/wyk-natm-xat. 40 Teaching Faculty/ Non teaching from ISE, CSE, ECE, Mechanical, Physics, IEM department were present. The

STC program focused on IoT Communication Protocols, Practical Implementations with Sensors. The main objective of the program was to make participants to understand the basic concept of IoT with cloud computing and Artificial intelligence.

Workshop on Experiential Learning

The Department of Information Science and Engineering in collaboration with IQAC conducted Experiential Learning for the students of III semester. The various events involved in this event included Project Exhibition, Poster Presentation, Heritage Walk and Food Walk.

Project Exhibition was conducted under the guidance of Dr. Rekha PM, for the subject ADE. The students used the concepts of the subject and IOT and developed projects like Home Automation, panipuri dispenser, Electronic Piano, Laser home security Alarm, Unbiased dice etc.

Few students also developed projects on Data Structures using Java. They simulated the concepts such as Tower of Hanoi, Stacks and Queues. This was under the guidance of Dr. Nagamani N P and Mrs. Sudha P R

The second activity was Poster Presentation for the subject Computer Organization, This event was under the guidance of Mrs. Sahana V

The next set of activities was for Social Connect and Responsibility coordinated by Dr. Nagamani N P and Mrs. Sudha P R. The activities included were:

Best out of Waste: Students exhibited various products prepared by them using waste papers, Paper cups etc.

Heritage Walk: As part of the syllabus students are supposed to visit historical places depicting the heritage of the place. In this regard students showcased the places they visited through photographs

Organic Farming and Water Conversation: In this regard, students exhibited through posters how water should be conserved for the future generations. They also designed posters for organic farming which showcased the health benefits for a healthy lifestyle

Food Walk: According to the syllabus the students are supposed to conduct a food walk depicting the region wise food, the ingredients, the health benefits, with respect to the same, a food fest was organized where students got food from their region and explained about its benefits.

Principal Dr. Bhimasen Soragaon inaugurated the event. The judges for the event were Dr. Saroja Bhusare and Dr. Poornima N, Associate Professors, ECE Department.

"Launch session-NASSCOM"

Launch session-NASSCOM was organized by JSS Academy of Technical Education, Bengaluru on 9 th Jan 2023 at seminar hall 1. The resource persons were Mr. Satish, Customer Success Manager, IT-ITeS SECTOR SKILLS COUNCIL NASSCOM and Mr. Dinesh Kumar, Regional Leader, IT-ITeS SECTOR SKILLS COUNCIL NASSCOM. The program started at 9.45 AM with 3 rd semester and 5 th semester students of all the branches, Dr. Nethravathi B, Associate professor, ISE department, SPOC NASSCOM welcomed all. Mr.Satish, Customer Success Manager, IT-ITeS SECTOR SKILLS COUNCIL NASSCOM started the session by the Introduction of NASSCOM, the importance of the certified courses under NASSCOM. He insisted CSE, ISE, ECE students to get enrol for the course "Machine Learning-Linear Regression" and for other branch students "Robotic Process Automation (RPA)" course which are now available at free of cost till the end of JAN 2023. Many Students have enrolled for the course said above; few have faced issues during the process. Mr. Satish, and Mr. Dinesh Kumar have helped the students in resolving the issues. The sessions were interactive, students asked many questions during the discussions like difference between NPTEL and NASSCOM. Sessions were helpful for students to understand the process of NASSCOM.

FDP on IPR and Trademark

With the blessings of His Holiness the inauguration of the FDP was scheduled on 12th September 2022 at seminar hall 1 of JSSATEB campus. The FDP was jointly organised by Cell for IPR Promotion and Management (Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry, Govt. of INDIA) The chief guest of the inauguration was Dr.S.K.Murthy Director, IPR, Intel Bengaluru. Guest of Honor was Dr. H.R. Mahadevaswamy, Joint Direction, Technical Education Division, JSS MahavidyaPeeta, Mysuru. President of the function was Dr. Bhimasen Soragaon Principal, JSSATE,

Bangalore. Inauguration started with the invocation song by, Kum:Divya.S.P student from Fourth semester ISE. Dr.Rekha.P.M, HOD, ISE department, JSSATEB welcomed the gathering. Dr.Nethravathi.B. Associate Professor, ISE Department JSSATEB briefed about the objectives and outcomes of the FDP. Chief Guest Dr.S.K.Murthy, Director, IPR, Intel Bengaluru briefed about the importance of Intellectual Property Right and Patent. He also mentioned about the Overview of Copyright and Trademark. The Presidential address was delivered by Dr. Bhimasen Soragaon Principal, JSSATE, Bangalore. He also shared his views regarding the IPR, Patenting and Copyright. Vote of thanks was delivered by Dr.Anil.B.C Associate Professor and Head of Department of Artificial Intelligence and Machine Learning. Principal of the college felicitated the chief guest Dr.S.K.Murthy.
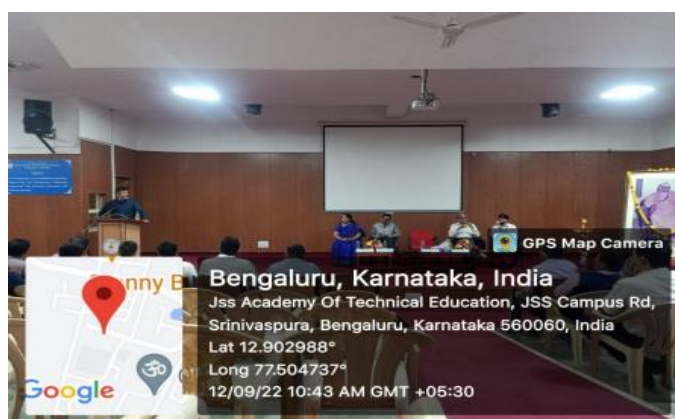
Awareness on AICTE points by Youth for Seva

A talk was organized by the Department of ISE on 2nd December 2021 for the III, V and VII sem students ISE. To raise awareness about giving back to our community that we live in. The department of ISE has called upon Youth for Seva an organization aimed at empowering the youth and giving them a chance to serve the community. This organization has over 6 thousand students trained across India and over 800 volunteers. Youth for Seva has been involved in various activities like vaccination drives, blood donation camp and chiguru- kids carnival to name a few. This organization helps us experience the joy of giving.activities and hope we all get a chance to experience the true joy of giving back.

Outcome: Many of the students have registered to work with Youth for Seva for a better community and now have the spirit of volunteering.

Open day Project Exhibition

ELECTRONICS & INSTRUMENTATION ENGINEERING

Seminar on Overview of FTIR Spectroscopy Instrumentation & its Applications to Molecular Analysis

A Seminar on "An Overview of FTIR Spectroscopy Instrumentation and its Applications to Molecular Analysis" was organized by the Department of Electronics & Instrumentation Engineering on 9th July 2022. Dr. Mahesh B, Professor & HoD, Dept. of chemistry, JSSATE, Benagluru was the speaker of this seminar. The objective of this seminar was to enlighten students about the various analytical instruments used to do analysis of organic and inorganic substances. The speaker discussed the different career avenues available in India and abroad.

The presentation also gave insights into analytical chemistry required for entering into the Pharmaceutical industries. Students have understood the application of Analytical instruments. Seminar was very much useful to students since they are studying Scientific and analytical Instrumentation subject in 4th semester. Finally this seminar was useful in understanding the opportunities for higher education and advantages with the various job opportunities in private and public sectors. This program was organized by Mr. B R Renukumar, Asst. Professor, Dept. of E&IE.

Industrial Visit to Government Tool Room & Training Centre (GTTC)

To demonstrate the technology requirements in industry the 4th semester students of E&IE visited Government Tool Room & Training Centre, Bengaluru was organized on 29th July 2022. Government Tool Room & Training Centre (GTTC) a globally acclaimed Tool Room and Training Centre. This is a joint venture of the Government of Karnataka and DANIDA, Government of Denmark, established in the year 1972. The Government of Karnataka has established 28 GTTC Centers all over Karnataka and a skill development center. The main objective of this visit was to enable students to know about Industry Oriented Technical Training Programs.

The GTTC, Bengaluru has various labs for PLC programming, Robotics, Process automation, CNC Programming, Tool & Die Making and Mechatronics etc. After the presentation, our students were allowed to visit the plant with all safety precautions. Our students visited robotics and automation related laboratories. Students are able to understand the use of PLC programming, Robotics, Automation in process industry where the sensors and actuators plays a major role. The complete process was demonstrated to students by S S Srinivasa Gopal, Sr. Manager of Government Tool Room & Training Centre, Bengaluru and Students got exposure to the process industry. A total of 29 students from 4th semester along with 2 faculty members Mrs.

Sowmya M S, Assistant Professors dept of E&IE and Dr. Ramya M V, Incharge HoD, Dept of Robotics and automation, JSSATEB visited the plant.


Industrial Visit to Integrated Process Automation Pvt. Ltd., Bengaluru

The Department of Electronics and Instrumentation had organized an Industrial Visit to **Integrated Process Automation Pvt. Ltd., Bengaluru** on 25th January, 2023.

The main objective of the visit was to make students understand about the process of production and assembly of sensors, transducer's, material handling and instrumentation such as load cells, crane scales, lorry weigh bridges, weigh feeders, etc. which are manufactured at IPA Pvt. Ltd.,

The students acquired an overall knowledge on the process involved in the automation industries. The 45 students of 3rd semester were accompanied by Dr. D.Jayadevappa, Professor & Head and Mrs. Sowmya M S, Asst. Professor, Department of E&IE, JSSATE, Bengaluru.
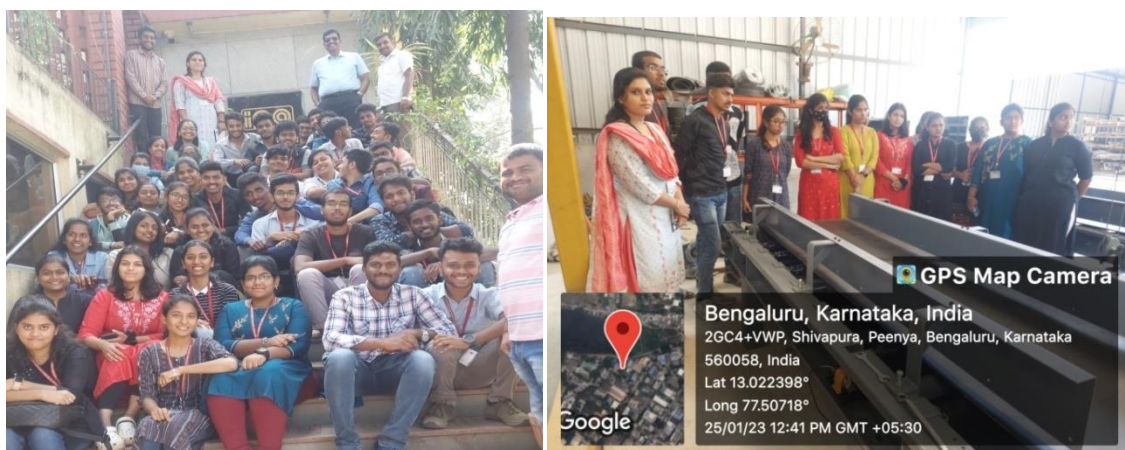
**Seminar on Career opportunities for Foundation Course on "Railway Electrification"**

A seminar on Career opportunities for Foundation Course on **"Railway Electrification"** was organized by the Department of Electronics and Instrumentation Engineering on 18th of April, 2023 at JSSATEB, by Mr. VLN Sastry, Training Manager & Facilitators and team, e2E Rail Village atYelahanka, Bengaluru was the guest lecturer of the seminar.

The main objective of the seminar was to provide insights into the different career opportunities available for students who have completed the foundation course on railway electrification. This seminar was to create awareness about training program on Railway Electrification, Job opportunities, Career paths and Apprenticeship in Indian Railway.

The speaker discussed the overview of the importance of training program and how advantageous it would be to grow technically. The following topics were discussed.

- Foundation Course.
- Importance and procedure to attend training program on Railway Electrification.
- e2E Rail Village is associated with many rail industry experts.

This seminar was attended by 8th semester students (31Nos.) of Electronics and Instrumentation Engineering and professionals from the railway industry, and it received positive feedback from all participants. This program was organized and coordinated by Mrs. Nagarathna N.
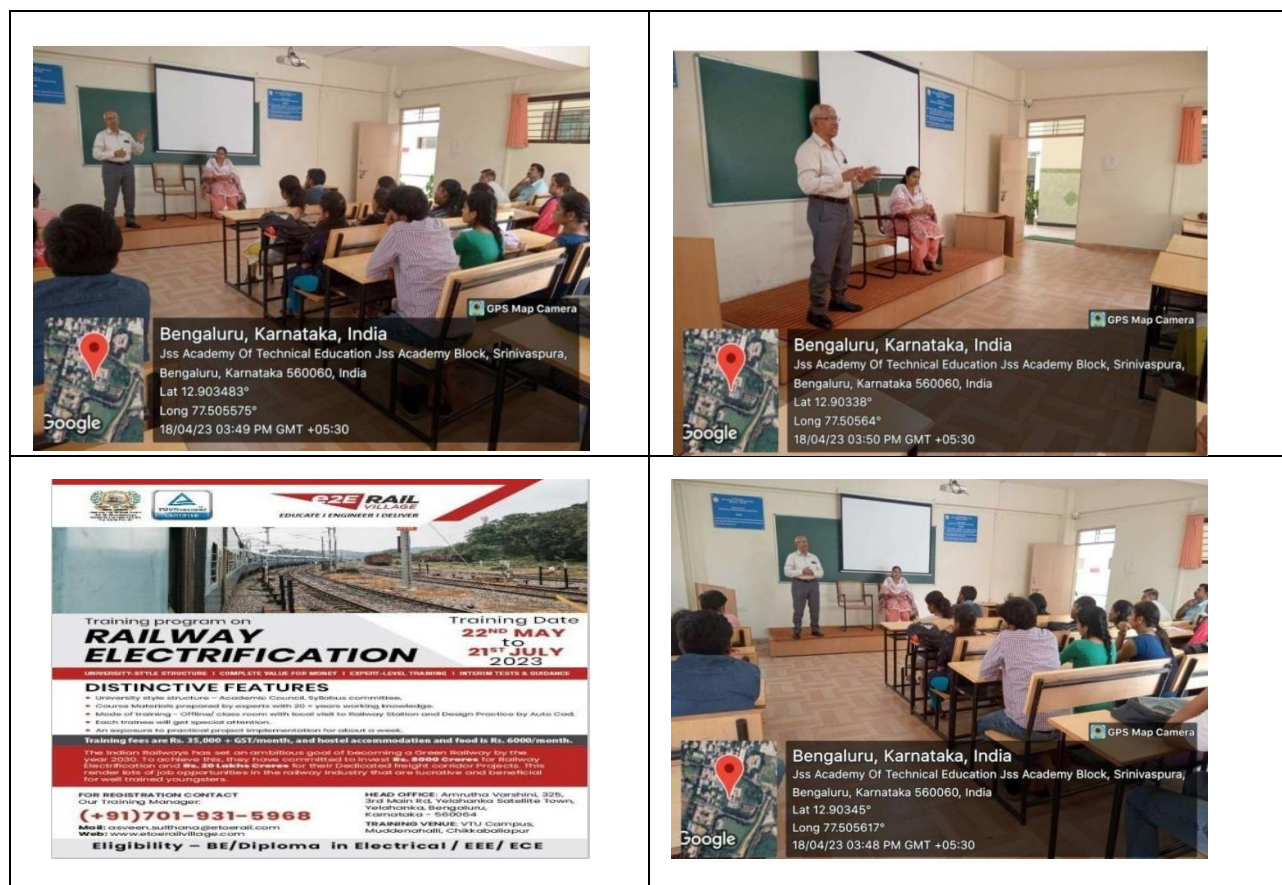
Open day Project Exhibition

DEPARTMENT OF (ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING)

OPERATING SYSTEMS AND ITS IMPORTANCE IN INDUSTRY

An operating system (OS) is a fundamental software component that manages and controls computer hardware resources and provides a platform for running applications and executing tasks. Its primary functions include:

1. Hardware Abstraction: The OS abstracts hardware complexities, providing a standardized interface for software to interact with various hardware components like the CPU, memory, storage devices, and peripherals.

2. Process Management: It oversees the execution of multiple processes (programs) simultaneously, allocating CPU time, managing memory, and ensuring efficient multitasking.

3. Memory Management: The OS allocates and deallocates memory for processes, ensuring efficient utilization of available RAM and storage space.

4. File System Management: It organizes and manages files and directories, including creation, deletion, and access control, providing a structured way to store and retrieve data.

5. Device Management: The OS handles communication between software and hardware devices, enabling applications to interact with peripherals like keyboards, mice, printers, and network adapters.

6. User Interface: Many OSs offer graphical user interfaces (GUIs) that allow users to interact with the computer through windows, icons, menus, and buttons.

7. Security: OSs implement security measures like user authentication, access control, and encryption to protect data and ensure system integrity.

In summary, an operating system is a vital software layer that acts as an intermediary between users and computer hardware, providing essential services and resource management to enable the effective and efficient use of computers.

LINUX OPERATING SYSTEM:

Linux is an open-source, Unix-like operating system kernel that serves as the core of various Linux distributions (distros). It was created by Linus Torvalds in 1991 and has since become a popular choice for servers, embedded systems, and desktop computers. Linux is known for its stability, security, and versatility.

Title:"Perspective of Industry on AI & MLand Generative AI/ChatGPT/LLMs"

Category: Technical Talk/Workshop Seminar

Date:05/08/2023

Target audience: First Year& Second year AI/ML Branch Students

No. of Resource Persons: 1

No. of Participants:150

Organized by: Department of CSE(AIML)

Resource Person(s) with Designation:

Objectives:

To Provide forum that provides a platform for all AIML students to discuss Perspective of industry on AI & ML and Generative AI/ChatGPT/LLMs.

Report

The technical talk on Perspective of Industry on AI & ML and Generative AI/ChatGPT/LLMswasorganised byDepartment of CSE(AIML) on 5th Augusts 2023. The Workshop Seminar was conducted from 9.30 am to 02.00pm at seminar hall 1,A Block.

Speaker Explained as follows

1. **AI & ML's Transformative Potential:**Industry recognizes AI & ML as transformative technologies with the potential to revolutionize various sectors, including healthcare, finance, manufacturing, and more.AI & ML enable data-driven decision-making, automation of tasks, optimization of processes, and the development of innovative products and services.

2. **Business Value and Competitive Advantage:**Many companies view AI & ML as a means to gain a competitive edge by extracting insights from data, predicting trends, and enhancing customer experiences.AI-powered solutions can lead to increased efficiency, reduced costs, and improved customer satisfaction, contributing to overall business growth.

3. **Challenges and Ethical Considerations:**Industry is aware of challenges related to bias, fairness, transparency, and accountability in AI systems. Ethical considerations are gaining prominence, and responsible AI development is emphasized.Ensuring AI models are unbiased, explainable, and aligned with human values is crucial to build trust with users and regulators.

4. **Generative AI and ChatGPT:**Generative AI models like ChatGPT have garnered attention for their ability to create human-like text and facilitate natural language interactions.Industries are exploring applications such as content creation, customer support automation, creative writing assistance, and more using generative AI.

5. **Large Language Models (LLMs):**Large Language Models, such as GPT-3 and its successors, are seen as groundbreaking in natural language understanding and generation.LLMs have the potential to revolutionize humancomputer interaction, enabling more sophisticated chatbots, virtual assistants, and personalized content creation.

6. **Skills and Talent Demand:**The industry demands AI & ML professionals who possess strong technical skills in machine learning algorithms, deep learning frameworks, data analytics, and domain

knowledge.Companies are investing in upskilling their workforce and collaborating with academic institutions to meet the growing talent demand.

7. **Regulation and Policy Landscape:**Industry is navigating evolving regulatory landscapes and standards related to AI ethics, data privacy, and responsible AI development.Governments and industry associations are working together to establish guidelines that balance innovation and societal well-being.

8. **Research and Innovation:**Industry and academia collaborate on research to advance AI & ML technologies, pushing the boundaries of what'spossible.Open research, knowledge sharing, and collaboration drive innovation and accelerate the development of new AI applications.

9. **Interdisciplinary Impact:**AI & ML have interdisciplinary applications, influencing fields like healthcare, finance, energy, agriculture, and more.Industry leaders are exploring ways to leverage AI for cross-domain solutions and address complex challenges.

10. **Continual Learning and Adaptation:**The industry acknowledges that AI & ML are rapidly evolving fields. Continuous learning and adaptation are essential to stay updated with the latest advancements and best practices.

In summary, the industry's perspective on AI & ML, Generative AI, and LLMs is one of excitement and potential, tempered by a strong commitment to ethical and responsible development. As these technologies continue to evolve, collaboration between industry, academia, and regulatory bodies will play a vital role in shaping their impact on society and the economy.

OUTCOMES:

Hosting a seminar on the perspective of the industry on AI & ML, Generative AI (including models like ChatGPT), and Large Language Models (LLMs) can lead to several valuable outcomes for participants, organizers, and the COLLEGE as a whole:

1. **Enhanced Understanding:** Participants gain a deeper understanding of the industry's views on AI & ML, Generative AI, and LLMs, including their potential applications, challenges, and ethical considerations.

2. **Insights from Experts:** Industry experts and practitioners share insights, case studies, and real-world examples, providing attendees with practical knowledge and insights into the current state and future trends of these technologies.

3. **Networking Opportunities:** The seminar provides a platform for students, researchers, professionals, and industry representatives to connect, fostering valuable networking opportunities and potential collaborations.

4. **Informed Decision-Making:** Attendees can make more informed career and research decisions by understanding how AI & ML technologies are shaping various industries and fields.

5. **Ideation and Innovation:** The seminar can inspire participants to brainstorm new ideas for applications, projects, or research related to AI & ML, Generative AI, and LLMs.

6. **Ethical Awareness:** Discussions about ethical considerations and responsible AI development can raise awareness among participants about the importance of addressing bias, fairness, transparency, and societal impacts.

7. **Industry-Academia Collaboration:** The seminar can promote collaboration between academia and industry, leading to joint research projects, internships, and knowledge exchange.

8. **Student Engagement:** AIML students can engage with industry professionals, gaining insights into potential career paths, industry demands, and skill requirements.

9. **Research Direction:** The seminar might guide students and researchers in choosing research topics that align with industry needs and emerging trends.

10. **Knowledge Dissemination:** The seminar's content and discussions can be documented and shared, benefiting a wider audience and contributing to the dissemination of knowledge.

11. **Feedback and Interaction:** Industry professionals can provide valuable feedback on academic research, helping students refine their projects and align them with practical industry requirements.

12. **Awareness of Emerging Technologies:** Participants become aware of the latest developments in Generative AI, LLMs, and related technologies, which can influence their academic and professional pursuits.

13. **Thought Leadership:** Organizers and speakers establish themselves as thought leaders in the field, contributing to the exchange of ideas and innovation.

14. **Positive Reputation:** Hosting a successful seminar can enhance the reputation of the organizing institution as a hub for AI & ML discussions and learning.

Overall, the seminar on the perspective of the industry on AI & ML and Generative AI/ChatGPT/LLMs can provide a platform for knowledge sharing, collaboration, and informed decision-making, benefiting participants and contributing to the advancement of AI technologies and their responsible use in society.

Photos

TECHNICAL SEMINAR on Transforming Data with Analytics Engineering.
In association with LAXIS ANALYTICS.

In the rapidly evolving landscape of technology and business, the significance of data analytics has grown exponentially. Organizations worldwide recognize the power of data-driven decision-making, and data analytics has emerged as the key driver behind their success. To delve deeper into this transformative realm, a thought-provoking and insightful seminar on data analytics was organized, aiming to enlighten participants about the latest trends, best practices, and cutting-edge tools in the field of data analysis.

This comprehensive seminar report aims to encapsulate the essence of the "Transforming Data with Analytics Engineering" seminar. It offers a detailed account of the topics covered, the key takeaways from each session, and insights gained from the panel discussions.

At LAXIS ANALYTICS , it is driven by a passion for problem-solving and empowering businesses through the strategic use of data. With our expertise in analyzing complex datasets, we provide actionable insights that propel organizations towards their goals. Our team of highly skilled data scientists, analysts, and consultants is dedicated to delivering cutting-edge solutions tailored to your specific needs. We delve deep into your data, unraveling patterns and trends that unlock hidden opportunities for growth and optimization.

1. Introduction to DATA ANAYLYTICS

Data analysis is the process of transforming raw data into valuable information, patterns, and insights to support decision-making and problem-solving. In today's data-driven world, businesses, governments, and research institutions rely heavily on data analysis to uncover hidden trends and relationships, predict future outcomes, and gain a competitive edge.

2. Importance of Data Analysis

Data analysis holds significant importance in various domains, including finance, healthcare, marketing, education, and scientific research. It aids organizations in identifying opportunities for growth, optimizing processes, understanding customer behavior, and mitigating risks. Decision-makers can make informed choices based on evidence rather than intuition, leading to more effective and efficient operations.

3. Data Analysis Process

The data analysis process generally involves the following steps:

- Data Collection: Gathering data from various sources, which can be structured (e.g., databases, spreadsheets) or unstructured (e.g., text, images).

- Data Cleaning: Preprocessing the data to address inconsistencies, missing values, and errors.

- Data Exploration: Conducting descriptive analysis to understand the data's characteristics and distribution.

- Data Modeling: Applying statistical and machine learning algorithms to build predictive models or uncover patterns.

- Data Interpretation: Extracting meaningful insights and conclusions.

Key Takeaways from Seminar

No code analysis using KNIME

KNIME (Konstanz Information Miner) is an open-source data analytics, reporting, and integration platform that allows users to perform a wide range of data processing, analysis, and visualization tasks. It is developed and
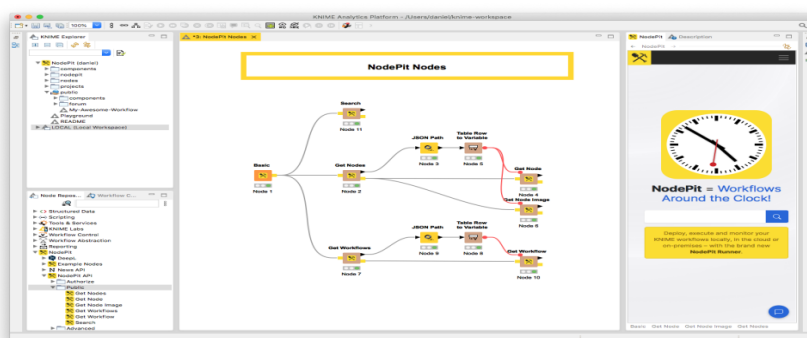
maintained by KNIME AG, a software company headquartered in Konstanz, Germany. KNIME provides a user-friendly graphical interface for building data workflows, making it accessible to both data analysts and data

scientists without requiring extensive coding knowledge.

Key Features of KNIME:

1. Workflow-Based Environment: KNIME enables users to build data analysis workflows using a drag-and-drop interface, making it easy to design complex data processing pipelines.

2. Diverse Integration: The platform supports integration with various data sources and formats, including databases, spreadsheets, Hadoop, cloud storage, and more, allowing users to work with diverse data types.

3. Wide Range of Analytics Tools:** KNIME comes with a comprehensive suite of pre-built nodes for data transformation, cleansing, manipulation, and statistical analysis. Additionally, it supports machine learning and advanced analytics through various extensions and integrations with popular libraries like TensorFlow, scikit-learn, and XGBoost.

4. Collaboration and Sharing: Users can share workflows and collaborate with team members, promoting a collaborative and efficient data analysis environment.

5. Data Visualization: KNIME offers various visualization options, including interactive charts, graphs, and reports, to communicate insights effectively.

SQL for Database

SQL (Structured Query Language) is a domain-specific programming language used for managing and manipulating relational databases. It provides a standardized way to interact with databases, allowing users to
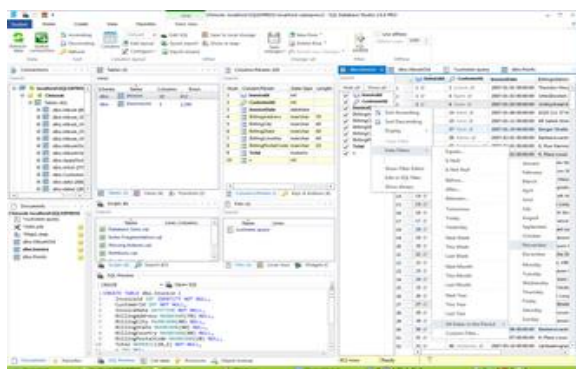
perform various operations such as querying data, inserting, updating, and deleting records, creating and modifying database structures, and managing access control.

Key Concepts of SQL:

1. Database Management System (DBMS): SQL is used in conjunction with a Database Management System, which is software designed to create, manage, and maintain databases. Some popular DBMSs that support SQL include MySQL, PostgreSQL, Microsoft SQL Server, Oracle Database, and SQLite.

2. Data Definition Language (DDL): SQL includes DDL statements to define and modify the structure of the database, such as creating and altering tables, defining constraints, and managing indexes.

3. Data Manipulation Language (DML): DML statements are used to interact with data within the database. Common DML operations include querying data using SELECT, inserting new records with INSERT, updating existing data with UPDATE, and deleting records with DELETE.

4. Data Control Language (DCL): DCL statements manage access to the database objects. These statements

grant or revoke permissions to users and roles for performing various operations on the database.

5. Querying Data: The SELECT statement is one of the most fundamental SQL commands used to retrieve data from one or more tables based on specified conditions.

6. Filtering and Sorting Data:SQL allows users to filter data using the WHERE clause, enabling the retrieval of specific subsets of records. Data can also be sorted using the ORDER BY clause.

7. Joins and Relationships: SQL supports various types of joins, such as INNER JOIN, LEFT JOIN, RIGHT JOIN, and FULL OUTER JOIN, which allow users to combine data from multiple tables based on related columns.

MS Power BI for Visual Representation

Microsoft Power BI is a leading business intelligence (BI) and data visualization tool developed by Microsoft. It enables users to connect to various data sources, transform raw data into meaningful insights, and create interactive reports and dashboards. Power BI is designed to empower businesses with data-driven decision-making capabilities by providing a user-friendly interface and powerful analytical features.
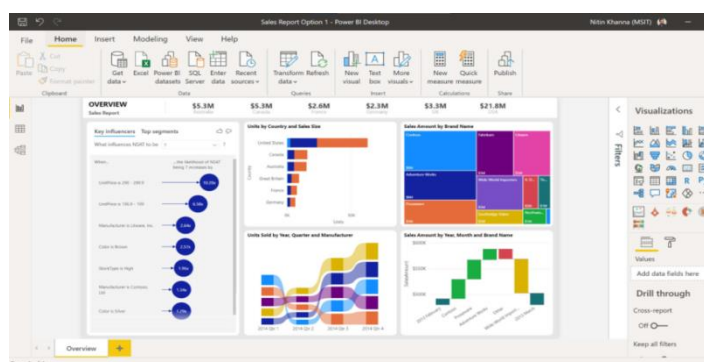
Key Features of Microsoft Power BI:

1. Data Connectivity: Power BI supports a wide range of data sources, including Excel files, databases (SQL Server, Oracle, MySQL, etc.), cloud services (Azure, SharePoint, Salesforce), web services, and many more. This connectivity allows users to access data from various locations for analysis and reporting.

2. Data Transformation and Modeling: With Power BI's Power Query Editor, users can clean, transform, and reshape data before analysis. Power Query's intuitive interface enables data preparation tasks like filtering, merging, and splitting data to create a unified dataset.

3. Data Visualization: Power BI offers a rich library of customizable data visualization options, including charts, graphs, tables, maps, and KPIs. Users can create compelling and interactive visuals to represent insights effectively.

4. Interactive Reports and Dashboards: Power BI's drag-and-drop functionality allows users to create dynamic reports and dashboards that respond to user interactions, such as filtering and drilling down into data to explore details.

5. Natural Language Queries (Q&A): Power BI supports natural language queries, enabling users to ask questions in plain English and get visualizations as responses, making data exploration more accessible to a broader audience.

6. Data Analysis Expressions (DAX): Power BI utilizes DAX, a formula language, to create calculated columns

and measures, perform advanced calculations, and build complex data models.
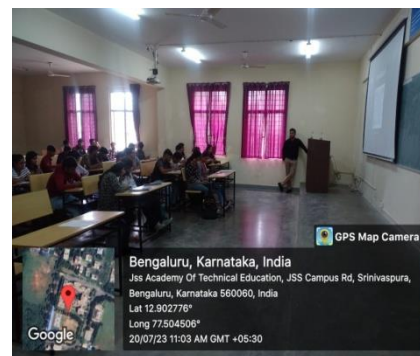
Title: **Assistive Devices by using AI**

Category: Technical Talk/Seminar

Date: 15/03/2023

Target audience: First Year AI/ML Branch Students

No. of Resource Persons: 1

No. of Participants: 85

Organized by: Department of CSE(AIML) and STEP-JSSATEB

Resource Person(s) with Designation: Mr. Thiyam Akuvan, Founder,Akumen Artificial intelligence PVT.Ltd.

Objectives:

To provide forum that provides a platform for all AIML students to discuss Artificial Intelligence technologies.

Report

The technical talk on Assistive Devices by using AI was organized by Department of CSE(AIML) and STEP-JSSATEB on 15 March 2023. The seminar was conducted from 11.30 am to 01.00pm at seminar hall 1.

Speaker Explained as follows

Akumen is a technology company that focuses on the intersection of artificial intelligence and social impact. The company uses machine learning, computer vision, and natural language processing to build solutions that can solve complex social problems. Akumen has developed a range of AI-powered solutions that can be applied to various social issues. What sets Akumen apart from other AI companies is its focus on solving social problems. They are not just developing technology for technology's sake, but are using AI as a tool to address real-world issues. Their solutions are practical, and scalable, and have the potential to make a real difference in people's lives. Akumen is committed to using technology for social impact. They have partnered with several non-profit organizations and social enterprises to develop solutions that can improve people's lives.

Akumen's commitment to social impact is not limited to its partnerships. The company is also actively involved in social causes such as making devices to help visually impaired persons. They have published several articles on these topics and have participated in several events and conferences related to social impact.

Company solutions are practical, and scalable, and have the potential to make a real difference in people's lives. What sets Akumen apart from other AI companies is its commitment to social causes. They are using AI as a tool to address real-world issues and are actively involved insocial causes such as developing and

researching devices for visually impaired people. Overall, Akumen is a technology company that is making a positive impact on society and is an example of how AI can be used for good.
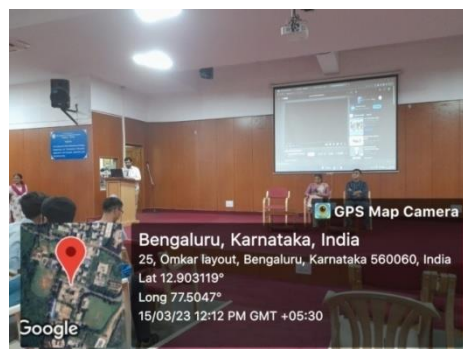
WORKSHOP ON "NO-CODE COMPUTER VISION AI MODEL DEVELOPMENT"

BY: Mr. Varun Poladiya

Co-Founder EduTronics& CEO, navan.ai

Introduction:

The workshop was focused on the development of computer vision AI models using no-code platforms and was conducted by the renowned speaker Mr. Varun Poladiya. The attendees learned about the potential of no-code AI in the field of computer vision and how it can help in creating AI models quickly and efficiently. The workshop was a great opportunity for the attendees to gain insights and knowledge from Mr. Varun Poladiya's expertise and experience in the field of AI and computer vision.

Neven.ai

Navan ai is a no-code artificial intelligence platform that enables users to create computer vision models without writing any code. The platform offers a range of tools and features to help users collect and label data, train models, and deploy them to different environments

Navan ai aims to make artificial intelligence accessible to a wider audience by eliminating the need for technical expertise in coding and machine learning. With its user-friendly interface, Navan.ai enables businesses and individuals to develop custom computer vision models and integrate them into their existing systems and workflows.

The platform supports a variety of computer vision tasks, such as object detection, image classification, and facial recognition, and can be used in a variety of industries, including healthcare, retail, security, and transportation. With Navan ai, users can take advantage of the benefits of computer vision without having to invest significant time and resources into developing their own models from scratch.

Valuable Takeaways:

• **Introduction to No-Code AI:** The attendees learned about the concept of no-code AI and how it is changing the landscape of AI development. They were introduced to Navan ai as a leading no-code AI platform.

Hands-On Experience with Nsven.al: The attendees had a hands-on experience of developing computer vision models using Navanai. They were shown how to collect and label data, train models, and deploy them to different environments

• **Advantages of No-Code AI:** The attendees learned about the various advantages of using no-code AI

platforms, including increased efficiency, reduced development time, and lower costs. They were also made aware of the challenges of traditional AI development methods.

• **Real-World Applications:** The attendees learned about the various applications of computer vision in different fields such as healthcare, retail, security, defense, drones, logistics, manufacturing and smart cities. They were shown real-world examples of how computer…
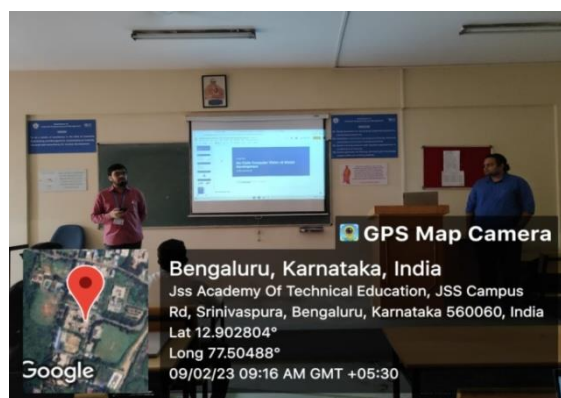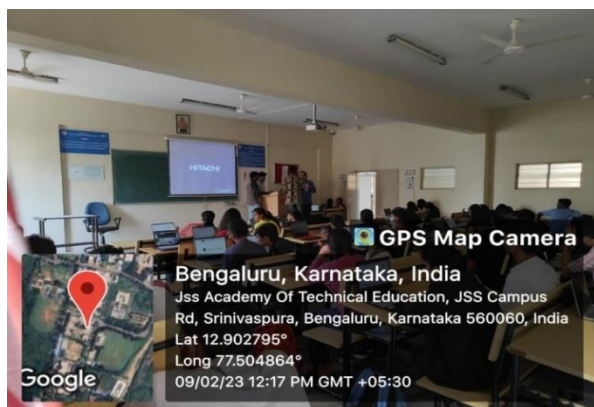
Inauguration of Department of CSE (AIML)

DAY 1: 15th December,2022 FUNDAMENTALS OF AI ML

DAY 2: 16th December,2022 SDP on Purpose of Life

PROGRAM SCHEDULE:

1.   Invocation by Kusmita and Vallabha

2.   Welcome Speech by Dr. Anil B C, HOD,CSE-AI&ML

3.   Lighting the Lamp

4.   Address by the Chief Guest

5.   Presidential address by the Principal

6.   Launch of AI&ML logo

7.   Prize distribution for the toppers

8.   Overview of the department clubs

9.   Vote of Thanks

10.   National Anthem

Day ONE

FUNDAMENTALS OFAI&ML

SPEAKER

Prof. Raghu Krishnapuram

Prof. Raghu Krishnapuram is currently Senior Advisor at ARTPARK and a visiting professor at the Robert Bosch Centre, IISc. He has published about 175 papers in journals and conferences.

Prof. Raghu Krishnapuram

TAKEAWAYS FROM THE SPEECH:

Passion is the fuel that inspires and drives people toward specific goals. It inspires loyalty,hard work, and, eventually, success.

Innovation cycle — it is a continuous cycle of product discovery, development and commercialization that enables companies to keep reinvesting in the next generation of technology.

Artificial Intelligence has various applications in today's society. it can solve complex problems with an efficient way. AI is making our daily life more comfortable.

Undoubtedly, Artificial Intelligence (AI) is a revolutionary field of computer science, which is ready to become the main component of various emerging technologies like big data, robotics, and IoT.

Innovation

Lamp lighting by chief guests

Branch Logo reveal

Felicitation Of Toppers

DAY 2 :
STUDENT DEVELOPMENT PROGRAM
SPEAKER

Mr. Kamal Kumar

• Mr Kamal Kumar is a globally Certified Executive Coach by ICF-CCA, Canada

• Mr Kamal was responsible for leading Sales and Business Development for L3 Harris, a global leader in Aerospace and Defence technologies.

• Mr Kamal was also the Managing Director of Dassault Systems in India.

• Mr Kamal was one of founding Directors of Apple in India. He was also associated with HCL-Hewlett Packard.

Purpose In Life

• Mr Kamal Kumar is a globally Certified Executive Coach by ICF-CCA, Canada

• Mr Kamal was responsible for leading Sales and Business Development for L3 Harris, a global leader in Aerospace   and Defence technologies.

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• The 7 Chakras symbolize energy centres and correspond to a bundle of nerves, major organs, and areas of our spiritual body that impact our physical and emotional well-being.

• Be goals, Do goals and Action goals.

• Neuroplasticity is defined as the ability of the nervous system to change its activity in response to intrinsic or extrinsic stimuli by reorganizing its structure, functions, or connections after injuries, such as a stroke or traumatic brain injury.

• The "power of yet" is about having a growth mindset.

• DOSE (Dopamine, Oxytocin, Serotonin and Endorphins) are called "angel chemicals" that enhance the overall well-being of people.

Interactive session by the chief guest

CIVIL ENGINEERING

Report on Founding Day celebration in association with the Indian Concrete Institute Student chapter, Bengaluru

Department of Civil Engineering, JSS Academy of Technical Education, Bengaluru organized a **Founding day celebration in association with the Indian Concrete Institute (ICI) Student chapter, Bengaluru on 07.09.2023 at 10:00am.**

The event started at 10.00 AM with the welcome address by Dr. Santosh B S, HOD, Dept. of Civil Engineering, JSSATE-Bengaluru. Prof Harshitha M N introduced the guest Er H R Girish, Chairman, ICI Bengaluru and speaker is Er. Vishwanath Rao Reginal Head- Quality Assurance control, Shapoorjipallonjipvt ltd, Bengaluru regionto the audience.

About the Speaker –

He is a Post Graduate in Civil Engineering with Close to 37 years of Experience. He has Specialized in Quality Management Systems, Quality Assurance, and Quality Control in the Construction Industry. Currently working as Regional Head- Quality Assurance/Control @ ShapoorjiPallonji& Co. Pvt. ltd., Bengaluru-Region

Associated Professionally with Indian Construction Majors like ShapoorjiPallonji& Co. Pvt.Ltd, GMR Infrastructure Limited-EPC Division, JMC Projects. He has experience in delivering large-scale projects in the Commercial, Industrial, Residential, Institution and Infrastructure (Highways and Runways) Sector.

Audience: First year (10 students) and Second year (35 students) students of Civil Engineering Department.

Topics Covered:

- The objective of the sessions is to familiarize the students with challenges involved in career/professional development especially in the Civil.
- Students must be aware of the opportunities available in the current scenario and the skill-sets they need to survive and grow in this dynamic context.

Benefit for students:

- ShapoorjiPallonji& Co. Pvt.Ltd has offered internships to students
- The company has also given permission to do site visit

The session was then open for the interaction between the speaker and the students, few students interacted with the speaker and cleared their doubts.Then the function was followed by the vote of thanks by Prof Harshitha M N.

Snapshots taken during the webinar

Report on One Week Online Workshop on "Geospatial Analytics"
Held from 26th Sept 2022 to 30th Sept 2022

Department of Civil Engineering, JSS Academy of Technical Education, Bengaluru and Karnataka Science and Technology Academy (KSTA), Department of Science & Technology, Government of Karnataka jointly organizedone week Virtual Workshop on "**Geospatial analytics"**from 26th September 2022 to 30th September 2022. The Program was funded by Karnataka Science and Technology Academy (KSTA), Department of Science & Technology, Government of Karnataka,

The Program was inaugurated on 26th September 2022. Prof. S Ayyappan Chancellor, Central Agricultural University, Imphal, Manipur, Chairman, Karnataka Science and Technology Academy (KSTA), Government of Karnataka was the Chief Guest, and Dr. H R Mahadevaswamy, Joint Director, TED, JSS Mahavidyapeetha, Mysuru was the Guest of Honor and Dr. Bhimasen Soragaon, Principal JSSATE, Bengaluru, Presided the function.Dr. Santhosh B.S., Head of the department, delivered welcome address.Chief GuestProf. S Ayyappan couldn't make his presence due to an emergency meeting. Dr. H R Mahadevaswamy, Joint Director, TED, JSS Mahavidyapeetha, Mysuru in his inaugural message expressed the benefs of One Week Workshop Programme and highlighted the importance of Geospatial analytics in day-to-day life.Dr. Bhimasen Soragaon, Principal JSSATE, Bengaluru delivered Presidential address and thanked KSTA for funding the Workshop. He also expressed how Geospatial Technology applications can create job opportunities in the future. Dr. Sanjay Shekar N C delivered the Vote of Thanks for the inaugural function.

The**One Week Virtual Workshop on Geospatial Analytics**was organized in a view to focus on geospatial tools which enables geospatial data, monitoring, tracing, measuring, assessment, identification, or modeling. The basic list of geospatial technologies encompasses **remote sensing (RS), GPS, and GIS**

The program was organised for one Week and totally 10 sessions were conducted by 7 Experts from various domains. I thank Dr. BramhaDutt V, from IISC Bengaluru, Dr. Uttam Kumar from IIIT, Bengaluru, Dr. R.

Karthikeyan Lanka, from IIT, Bombay, Dr. Rishikesh Bharti from IIT, Guwahati, Dr. Ramiya A M IIST, Thiruvananthapuram, Dr. Arun P V, from IIIT Chittoor, and Prof. Eswar Rajasekaran IIT, Bombay for their valuable time spent in sharing the knowledge.

Day 1 – 1st session began with welcome address and introduction of the speaker by Dr. Hemalatha H N. The speaker Dr. BramhaDutt Vishwakarma, IISC, Bengaluru started the session with an introduction of Geodesy for Earth system science and the importance of the description of geodetic measurements. He briefed about Geospatial technology applications in Earth system science. The 2nd session began with speaker Dr. Uttam Kumar, IIIT, Bengaluru. The speaker started the session by introducing Machine Learning for Geospatial Analysis using Remote Sensing Data and the importance of machine learning in GIS for prediction, classification, and clustering.

Day 2- 3rd session began with speaker Dr. Ramiya A M, IIST, Thiruvananthapuram. The speaker shared the information on Introduction to Building Modelling from LiDAR and modeling the campus with geodetic measurements. The 4th session began with speaker Dr. Uttam Kumar, IIIT, Bengaluru. The speaker briefed about the semi-supervised classification for Geospatial Analysis using Remote Sensing Data for Tree Canopy Detection and Extraction from UAV Images.

Day 3- 5th session began with speaker Dr. Rishikesh Bharti, IIT, Guwahati. The speaker started the session by introducing Satellite Remote Sensing and Drone Surveying, acquiring information about an object or phenomenon without making physical contact with the object, in contrast to on-site observation. The 6th session began with speaker Dr. Rishikesh Bharti, IIT, Guwahati. The speaker started the session with an introduction to Geographic Information Systems. He later described how GIS systems are utilized in multiple technologies, processes, techniques and methods.

Day 4 – 7th session began with speaker Dr. Karthikeyan Lanka, IIT, Mumbai. The speaker started the session with an introduction to Remote Sensing applications in Agriculture for Food Security. The 8th session began with speaker Dr.Eswar Rajasekaran, IITB, Mumbai. The speaker started the session by introducing Hydrometeorology, which studies the transfer of water and energy between the land surface and the lower atmosphere.

Day 5 – 9th session began with speaker Dr.Eswar Rajasekaran, IITB, Mumbai. The speaker continued the session by discussing of Evapotranspiration (ET) which plays a vital role in efficient crop water management. The 10th session began with speaker Dr.Arun P V, IITB, Mumbai. The speaker started the session by introducing Machine Learning applications in Precision Agriculture.

The workshop concluded with the validictory program on 30-09-2022. Dr. Santhosh B.S., Head of the department, delivered welcome address. Dr. Ramesh A. M., Chief Executive officer, Karnataka Science and Technology Academy, Government of Karnataka was the Chief guest. He appreciated the effort of JSSATEB for organizing the workshop on Geospatial Analytics.   Er. H. R. Girish, Honorary Chairman, Indian Concrete Institute, Karnataka- Bangalore Centre was the Guest of honor for this validictory program. He addressed the importance of Geospatial technologies. Dr. Sanjay Shekar N C presented the Workshop report. Dr. Hemalatha H. N. proposed vote of thanks for the validictory program.

Glimpses of the Workshop
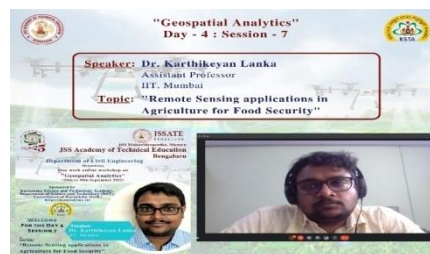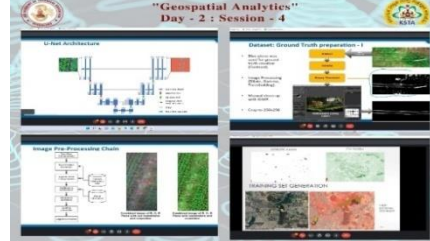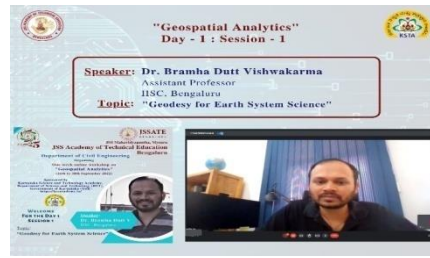
Report on Technical Evening Lecture on "LIGHT WEIGHT, DURABLE, COST-EFFECTIVE HOUSING STRUCTURES"

Preamble:

Technical Evening Lecture is a concept that was adopted by Association of Consulting Civil Engineers and Indian Concrete to pool and share the knowledge of day- to-day advancements in construction industry among different group of Civil Engineers such Industrialists, Academicians, budding engineers and students. The program was hosted by the Department of Civil Engineering, JSS Academy of Technical Education, Bengaluru in association with Association of Consulting Civil Engineers (I), Bangalore centre and Indian Concrete Institute, Bangalore Centre on 16th September 2022 from 6:30AM to 8:30 PM in line with Engineers Day Celebration.

About the Event:

Technical Evening Lecture "LIGHT WEIGHT, DURABLE, COST-EFFECTIVE HOUSING STRUCTURES" was organized to give overview to the audience on importance and cost effectiveness of Light weight housing structures.

Good housing systems are the basic component that has influence on living standard of people and thus construction of cost-effective houses affordable by all class of people are a major area of interest in the Civil Engineering Sector. Understanding the importance of good housing and the resulting improvement in the people's living standard and quality of life is fundamental.

This short lecture focuses on the use of composite material in construction of Light Weight and Cost-Effective houses.

Dr. R Gopalan

Director and CEO, RV-TIFAC composites design center

Established by Government of India in Bangalore

The event was started at 6:30 PM with an invocation song by Ms. Yogitha M R followed by Lamp lighting by the dignitaries on the stage. Dr. Santhosh B S, Head, Department of Civil engineering, JSSATEB coordinated the program and thanked both the ACCE and ICI for the opportunity to host the technical Event at JSSATEB. Er. Girish, Hon. Chairman, ICI-BENC welcomed the speaker, and all the dignitaries and shared the information about ICI and the purpose of conducting the Technical Lectures.

After the warm welcome, the gathering was addressed by Er. Shrikant Channal, Hon. Chairman, ACCE-BLR. He spoke about the professionalism and its requirement for Civil engineers. He created awareness among Civil Engineers by saying how the identity of Civil Engineers have to be protected as a separate profession similar to Lawyers, Doctors etc. by joining hands together with associations like ACCE and ICI. Also, how to enhance our job opportunities in Government and Private sectors and in the society through professionalism.

Then the session was followed by the introduction about the speaker Dr. R Gopalan to the gathering by Er. Ajith Kumar S R , Hon. Secretary, ACCE-BLR and stage was handed over to the speaker.

Dr.R Gopalan started his lecture on "LIGHT WEIGHT, DURABLE, COST-EFFECTIVE HOUSING STRUCTURES" by remembering the fruitful time he spent with Dr. APJ Abdul Kalam when Kalam ji visited RV-TIFAC composites design center, Bangalore.

He started the conversation with introduction to composite material and Need for ECO FAST Building Systems and Fast Track Building Construction Technology. He explained about how their research could help in developing a composite material as alternative building material and also how different types of sandwich composite structures were developed. He also highlighted on how composite material is in practice and introduction of these composite structures in Schedule of Rates by Government of Karnataka in 2015-16. He then shared his work experience in HAL in design of Light weight fighter aircraft and then the building structures. He demonstrated the process of manufacturing and assembling with sample videos and displayed live structures constructed all over the world like shelter for military base, Hospital buildings at different districts in Karnataka, House for police officials etc. Finally he ended his lecture with comparison between Light weight structure and regular structure in terms of Weight, Cost, duration of construction and ease of construction.

At the end the speaker Dr.R Gopalan and the official host of the program Dr. Santhosh B S were felicitated by other dignitaries and program was ended with vote of thanks by Er. Shrikant channal, Hon. Chairman, ACCE-BLR.

Events/ Seminars/Technical talks organized

2022-23

SI.No	Event	Date	Resource Person
1	One Week Online Workshop on "Geospatial Analytics"	26-09-2022 to 30-09-2022	1. Dr. BramhaDuttVishwakarma, IISC, Bengaluru 2. Dr. Ramiya A M, IIST, Thiruvananthapuram 3. Dr. Rishikesh Bharti, IIT, Guwahati. 4. Dr. Karthikeyan Lanka, IIT, Mumbai 5. Dr.EswarRajasekaran, IITB, Mumbai.
2	Founding day celebration in association with the Indian Concrete Institute (ICI) Student chapter	07.09.2023	Er. Vishwanath Rao Reginal Head- Quality Assurance control, Shapoorjipallonji pvt ltd, Bengaluru
3	Technical Evening Lecture on "Light Weight, Durable, Cost-Effective Housing Structures"	16.09.2022	Dr. R Gopalan Director and CEO, RV-TIFAC composites design center Established by Government of India in Bangalore

Open day Project Exhibition

PHYSICS DEPARTMENT

**A report on the visit to IIA, Bengaluru from the students of ISE-Bon 17/08/2023 @ 2 PM.**

An industrial/campus visit to Indian Institute of Astrophysics, Bengaluru; has been arranged for the students of Information Science &Engineering as a part of the skill lab activities by the Department of Physics, JSSATEB-60. A total of 33 students (list enclosed) along with the faculty Coordinators Dr. S Prasanna Kumar, Professor &Mr. Mohanakumara LB, Assistant Professor, Department of Physics JSSATEB -60. The entire team visited the institute @ 2.15PM Mr. Vikrant Pulamathi & Dr. Prasanna Deshmukh have given the brief introduction to the students about facilities and opportunities available at IIA. They gave us the insight to Science astronomy and its technology. They took us to Optics lab and explained the basics of optics; and had shown us the telescope. It was later the working of Ultra Violet Imaging Telescope (UVIT) was explained by Mr. Vikranth Pulamathi.

The students had an opportunity to visit the scientists @ IIA and had serious discussions. The students too appreciated the opportunity provided by Principal and Management of JSSATEB for their visit to IIA.

The team of students and the faculty whole heartedly thank the Principal and management of JSSATEB for encouraging the students and the faculty enriching their knowledge.

Faculty Coordinators: 1) Dr.Prasanna Kumar S

                             2) Mr.Mohanakumar LB
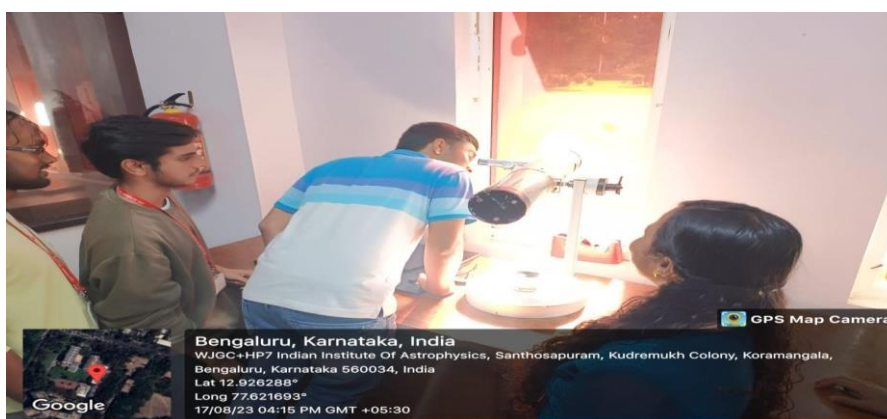
Open Day Event – Report Template

Level: National

Title: **Open Day Event conducted by IISc BangaloreCategory:**

One Day Event

Date: 4th March 2023 (9 a.m to 5p.m)

No. of Participants: 44

Organizers: IISc Bangalore

Mode: Offline

Objective: The open day attempts to encourage a spirit of scientific investigation in individuals of all ages. Students will be able to examine various sophisticated scientific equipment and facilities, as well as how they are used to help solve fundamental issues and design engineering solutions.

Report: Brief report on Open Day at IISc Bangalore held on 4th March 2023 (from 9 a.m to 5 p.m)

Around 34 students from EIE Branch and 10 students from Civil Branch of 1st semester along with faculty Dr. Abhilasha Singh and Mohanakumara LB visited Open Day Programme on 4th March, Saturday at IISc Bangalore, 2023. The details of the various departments, stalls/labs visited by the students are mentioned below:

1. **Aeroelasticity lab, Turbulent Shear flow Physics and engineering laboratory, Health Monitoring of Aerospace Structures using Acoustic Wave Propagation.**

2. **Centre for Atmospheric and Oceanic Sciences:**

    In this department the following experiments have been displayed:

   a. Tornado: Simulation of tornado is a glass box
   b. Smoke Rings: Generation of vortices.
   c. Mixing and unmixing: Very slow and viscous flows are reversible.
   d. Ocean waves: Waves generated at interface two different density layers.

3. CENTRE FOR INFECTIOUS DISEASES RESEARCH (CIDR):

Posters, 3D models, videos related to work on Viruses and Bacteria causing infectiousdiseases

4. ELECTRICAL COMMUNICATION ENGINEERING (ECE):

Demos on 5G Technology, wireless power transfer, microwave sensing, self-balancingrobots, games on coding theory and photonics.

5. **SUPERCOMPUTER EDUCATION AND RESEARCH CENTRE (SERC):** Skeleton of a supercomputer - Look "inside" a supercomputer to see what it is made of!SERC Museum - A display of archaic (super) computer components

Posters on our HPC facility evolution and research done on supercomputers.

Outcome:

Students learned about simulation of tornado in box, generation of vortices, various virus and bacteria causing infectious diseases, skeleton of supercomputer (how it looked like), details of power transfer, 5G

technology etc. They had the opportunity to witness the scientific temper in the IISc and the latest technology in the various field of science and engineering. They had the exposure towards the integration of science to develop the technology and technological devices and the cutting edge of research and developments at the various departments.

The visit was coordinated by Dr. Shashidhar R (Associate Professor and HOD Physics Department) and Dr. Nityanand Choudhary (Professor Physics Department)

Photo Gallery:
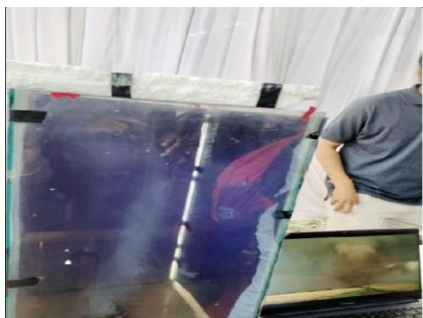
Skill Lab Report

All the students (CSE"A", CSE"B", CSE"C", ISE"A", ISE"B", ISE"C", AIML"A", AIML"B") have actively participated resulting in total of 31 projects under the supervision of faculty members of Physics Department. The title of the projects is mentioned below:

Sl.No.	Title	Branch	Faculty
1	Principles of Wireless Transmission of Electricity through a Tesla Coil		
2	Li-Fi Technology	AIML	Dr.Nityanand Choudhary
3	Exploring the Tesla Coil: A journey into high voltage phenomenon	CSE-C	
4	On principles of wireless transmission of electricity through Tesla Coil	AIML	
5	Principles of e.m induction using simple electric train	CSE-C	Dr. Prasanna Kumara S
6	Bridging knowledge and practise: A voyage to IIA for telescope building insights	ISE-B	
7	Laser Security System	AIML	
8	Earthquake alarming system	AIML	

9	Zinc Oxide Nanoparticles Characterization	CSE-B	Dr. Shashidhar R
10	Speed Detector ByUsing Single Ldr	CSE-B	
11	Intruder Alarm	CSE-B	
12	Applause ActivatedControl- The Clap Switch Solution	CSE-B	
13	Fire Alarm	ISE-B	
14	River Cleaning Boat	ISE-C	
15	Generation of Hydroelectricity: Harnessing the Power of Water	CSE-A	Dr. Abhilasha Singh
16	Data Transfer Using LIFI Technology	ISE-A	
17	Sonar	ISE-A	
18	Charging Mobile Phone using sunlight	ISE-C	
19	Solar TrackingDevice	ISE-C	
20	Automatic Parking system	CSE-A	Ms. Sushma KC
21	Wireless Charging	CSE-A	
22	Hydraulic arm with suction mechanism and C-shaped arm		
23	Laser guided bank security system	ISE-C	
24	Rain detector	AIML	
25	Line Follower Robot	ISE-B	Mr. Mohana kumara L B
26	Sound Visualizer	ISE-B	
27	Electromagnetic Train	CSE-A	
28	Tesla Coil	AIML	
29	IOT Based Fire Alarm System Using Node MCU ESP8266	ISE-A	
30	Metal detector	CSE-A	
31	Hologram	ISE-A	

Magnetic lifter using hydraulics

Lifi

Faculty In Charge: Dr. Nityanand Choudhary

Laser Security System

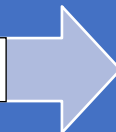Exploring the Tesla Coil: A journey into high voltage phenomenon

On principles of wireless transmission of electricity through Tesla Coil

Telescope building Insights

Faculty In Charge: Dr. Prasanna Kumar S

Intruder Alarm

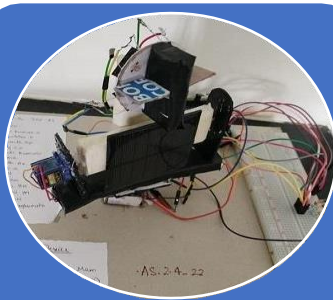Fire Alarm Detector

LDR Speed detector

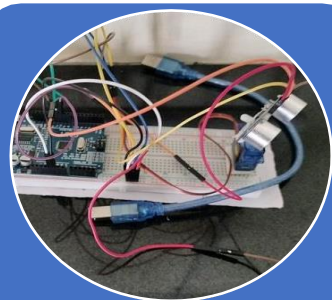The Clap Switch

River Cleaning Boat

Faculty In Charge: Dr. Shashidhar R

Li-fi

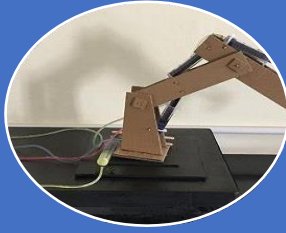Solar Tracking Device

Sonar

Solar Panel Mobile Charger

Generation of Hydroelectricity: Harnessing the Power ofWater

Faculty In Charge: Dr. Abhilasha Singh

Automatic Parking System

Hydraulic Arm with Suction mechanism

Wireless Charging

Laser guided bank security system

Rain Detector

Faculty In Charge: Ms Sushma KC

Line Follower Robot

Sound Visualiser

Electromagnetic Train
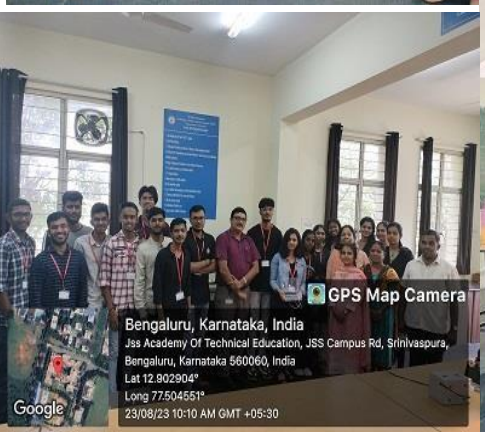
IOT Based Fire Alarm System

Metal Detector

Hologram

Faculty In Charge: Mr. Mohanakumara LB

Skill Lab Report

Department of Physics has initiated skill lab for Academic Year 2022-23 (1st Semester). All the students (EC"A", EC"B", EC"C, EIE, ME&RA and Civil) have actively participated and total 19 projects have been received under the supervision of faculty members of Physics Department. They have submitted a brief report of the project to the respective faculty members. The title of the projects is mentioned below:

Sl.No.	Title	Branch	Faculty
1	Faults in the line: Detecting Transmission line faults	EC "A"	Mr.Mohana kumara L B
2	Water level Indicator		
3	Smart Door Locker		
4	Fire Alarm		
5	Mini Power Box Inverter	EC"B"	Mr.Mohana kumara L B
6	Laser Trip Wire Security Alarm System		
7	3D Hologram		
8	Clapping Switch Experiment	EC"C"	Dr. AbhilashaSingh
9	Black Box Experiment		
10	I-V Characteristics of Zener Diode		
11	Obstacle Avoiding Robot		
12	Anti Sleep glasses	EIE	Dr. AbhilashaSingh
13	Solar Mobile Charger		
14	Electric Table Fan		
15	Smart Blind Stick		
16	Silicon Dioxide Nanoparticles	ME & RA	Dr. Prasanna Kumar S
17	Aerogenerator		
18	Mobile Charging using SolarEnergy		
19	Homemade Lidar Sensor	Civil	Dr.Shashidhar R
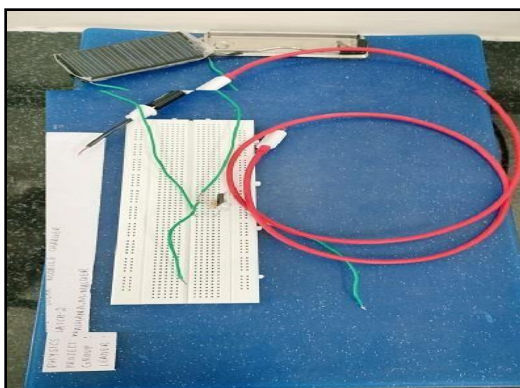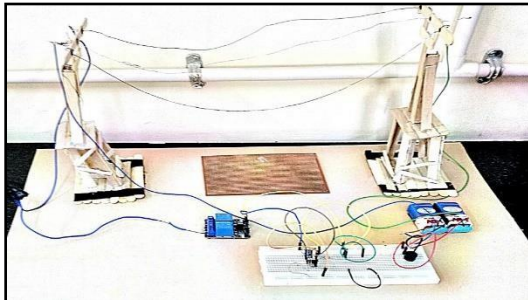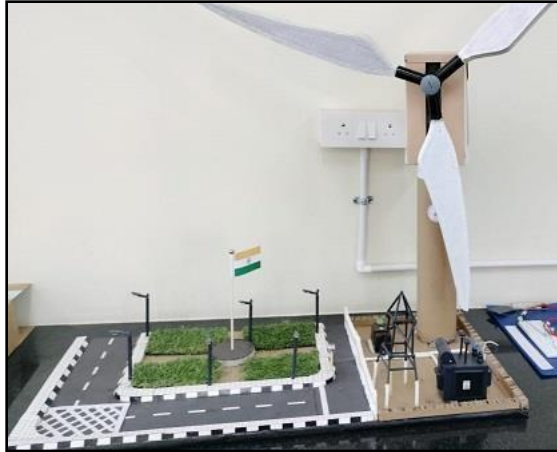
ROBOTICS & AUTOMATION ENGINEERING

Expert talk on Emerging Trends in Automation Technologies

Date: 09.02.2023

Time: 12pm to 1.30 pm

Venue: A110

No of Participants: 21

Faculty Coordinators: Dr. Ramya M V, HOD

Resource Person: Santhosh M S, Head-Didactics, HYDAC (India) Pvt. Ltd., Bengaluru

The Department of Robotics & Automation, JSSATE, Bengaluru, organized an expert talk, development program on

Emerging Trends in Automation Technologiesfor III semester students. Mr. Santhosh M S, Head-Didactics, HYDAC (India) Pvt. Ltd., Bengaluru, delivered the talk.

Photographs

Technical Talk on "Robotics, Automation & Chat GPT"

Date: 7th July 2023.

Resource Person: Dr. Ravikumar, Professor, Department of ECE, MIT, Mysuru & Chairperson IEEE-Bangalore section

Students: II & IV semester

No. of Students. 40

Brief Report

glimpse of the session

Robotic Process Automation (RPA) is a transformative technology that automates repetitive tasks. It involves using software-driven robots to execute rule-based, repetitive tasks typically performed by humans. ChatGPT, a state-of-the-art language model, has shown significant advancements in understanding and generating human-like text. Integrating ChatGPT into RPA systems introduces a conversational layer, allowing bots to naturally understand and respond to human inputs.

Dr. Ravikumar, from MIT, Mysore, also Chairperson of the IEEE Bangalore Section, graced our department with his presence and divulged his thoughts and insights with students of the II & IV semesters. He began with a simple question, "What is a bot?" which drew out varied answers. It was concluded that a bot is a machine that performs specified tasks that may be repetitive or unique, depending on the application. What if these bots are integrated with natural language processing (NLP) algorithms that are Artificial Intelligence driven to magnify and elevate their functionality and add a human-like touch? Chat Generative Pre-Trained Transformed, popularly called "ChatGPT," is a recent development that has made many human lives faster, easier, and more accurate with its capabilities. Thus, interfacing robots and NLP's like ChatGPT and BardAI can generate models like never before. These models provide Improved User Interaction and Dynamic Process Adaptation, where bots can interpret context and adapt to variations in tasks, making them more flexible and capable of handling dynamic workflows, HR, and Employee Onboarding, which guides new employees through the necessary paperwork, explains company policies, and conversationally answers their questions, Ethical Use and most importantly Decision Making, which surpasses the problem of any form bias, indecisiveness or prejudice that humans may possess as individuals. Eliminating minute inaccuracies in the initial stages of data processing by incorporating languages such as ChatGPT within our futuristic bots helps produce models that are a cut above the rest. He culminated the insightful session with extra food for thought, which made us question the need for human interference once these bots are designed to be fully and, more importantly, independently capable of implementing tasks that still require human meddling today.

Robotics E-Yantra Laboratory
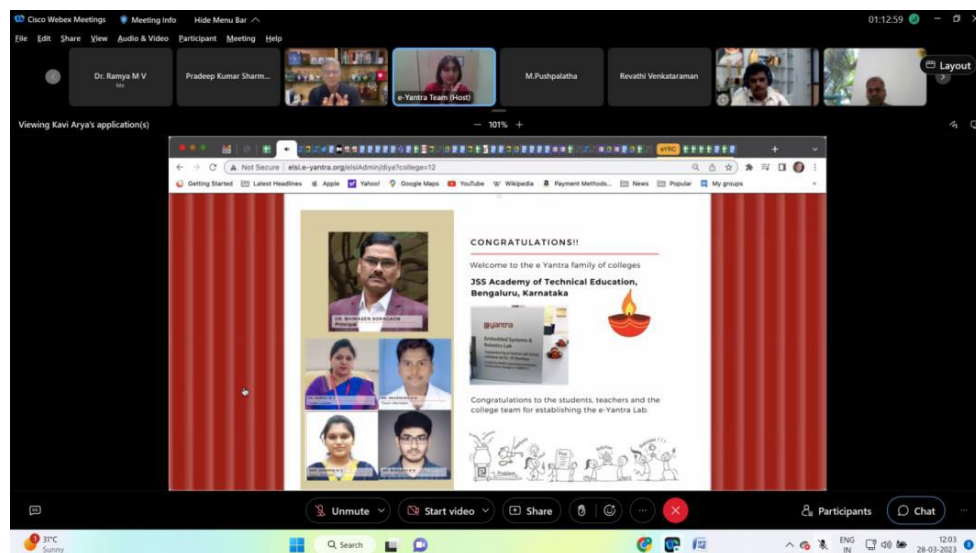
Inauguration of Robotics E-Yantra Laboratory supported by IIT,Bombay on 28.03.2023

Resource Person: Dr. Kavi Arya, Professor, Principal Investigator, e-Yantra, CSE Department, IIT Bombay

Industry sponsored e-yantra Robotics Laboratory was inaugurated online on 28th March'23 by Dr. Kavi Arya, Professor, Principal Investigator, e-Yantra, CSE Department, IIT Bombay. During the inauguration Dr. BhimasenSoragaon Principal-JSSATEB, Dr. Ramya M V e-yanta team leader, Mr. Mahendra H N e-yantra team member, Mrs. Sowmya M S e-yantra team member , Mr. Bharath M N e -yantra team member and e-yantra student team were present.

e-Yantra is a robotics outreach program funded by the Ministry of Education and hosted at IIT Bombay. The goal is to harness the talent of young engineers to solve problems using technology across a variety of domains such as: agriculture, manufacturing, defence, home, smart-city maintenance and service industries.

Industrial Visit to FANUC India Private. Limited on 7thDecember 2022

Objectives

 To know the manufacturing, production, and operations of the company

 To help student gain practical knowledge

 To keep students, update on the latest trends in the industries.

Date, Time & Venue

Date: 7thDecember 2022

Time:10:00 AM to 1:00 PM

Venue:FANUC India Pvt. Ltd., 41-A, Electronics City,Hosur Road Bangalore - 560100, Karnataka.

Brief Report

FANUC CORPORATION, Japan is a pioneer in Computer Numerical Control (CNC) technology since 1956. In today's manufacturing world, "FANUC" is amongst the most reliable and dependable brands on any shop-floor.FANUC India Private Limited is a subsidiary of FANUC CORPORATION and was established in 1992 with its headquarters in Bangalore.

The FANUC India Pvt. Ltd., was visited by 18 students of III semester along with Dr. Ramya M V&K S Mahesh, from the Department. The visit to the plant was via college bus. We left the campus at 9:00 am&arrived at FANUC Industries at 10 am. We were received by **Mr. Balasubramanian**, Head, FANUC Training Academy. He gave a brief insight into to the FANUC industries, their product portfolio, service & support & Training facilities, which finds a lot of applications in the emerging areas such as medicine, automobile (EVs included), packaging, jewellery industries etc.We were taken on a tour of their facility. The facility housed over 15 articulated robots that were designed and operated by FANUC, the most interesting of which was the collaborative robot that can work side by side with humans or collaborate with them without the need for external safety devices. As a result, you enjoy better versatility and work ergonomics and save production space. The students then a got a hands-on experience of how to operate a robotic arm.

FANUC is now committed towards making industry 5.0 a reality, where the focus lies on the interaction between humans and machines. FANUC also has offers training on the following area/domains.

- NC Guide:A simulation software where you can learn CNC on PCs.

- CNC Simulator:A CNC simulator unit, suitable for learning CNC with real operational feeling.

- FANUC ROBOGUIDE:ROBOGUIDE provides a shared database for robot system lifecycle management and helps in system design, maintenance, ROBOGUIDE stores all information and know-how. We then made our way to Tata Advanced Systems.

Outcomes

Students gained the knowledge and able to understand the following:

- Company profile, Organization structure & Product Portfolio

- Application areas of Robot

- Career opportunities

Visit to Robotics Innovation Lab, CPDM, IISc, Bangalore

Objectives

- To know the manufacturing, production, and operations of the company

- To help student gain practical knowledge

- To keep students, update on the latest trends in the industries.

Date, Time & Venue

Date: 29/05/2023

Time: 10 am to 11.45 am

Venue: Robotics Innovation Lab, CPDM, IISc, Bangalore.

Resource Person: Dr. Abhra Roy Chowdhury, Assistant professor, CPDM, IISc, Bengaluru.

Brief Report

17 students (09 from II semester & 08 from IV semester) of Robotics & Automation Department visited the Robotics Innovation Lab, at CPDM, IISc, Bangalore on 29.05.2023. The entire facility is a research and development setup, where in various fields such as collaborative robots, social robots, drones and motion robots are explored and tested. The motion robotics division was slightly more gripping as it involved detecting the frequency of brain waves from

distinct parts of the brain such the occipital region, frontal-parietal control regions, thalamus and cerebellum, strengthening them and processing them. Once the frequency generated has been mapped to a particular motion, it is fed into the robot, and the robot performs an action similar to the image one has in mind. All of this takes place within a matter of seconds. The collaborative robot segment held within it a voice-controlled robot which could perform various tasks such as object recognition, colour detection, pick and place operations, snapping photographs to name a few. This particular robot is also to participate in the ICRA competition. The social robot section housed a companion robot for both the elderly and the young. Both age groups are in need of constant attention and supervision of one form or another which is guaranteed by this talking, moving, almost life like robot. It also solves the seclusion issues effectively amongst both age groups. The aerial division focussed on various kinds of drones for surveillance, monitoring and feedback in the defence area. These are made in a manner that allows them to traverse uneven terrain, inspect anomalies and if possible provide an instant fix. On the whole, the visit exposed us to the opportunities and drawbacks present in the world of robots, how us students can extract as much as possible from the theoretical knowledge we gain during our professional courses and later apply them practically and accurately to build something beneficial to both the society

Outcomes

Students gained the knowledge and able to understand the following:

- Career opportunities in Robotics & Automation
- Designing/Building Robots with respect to various applications and support received through various agencies like e-yantra, IITB, MathWorks etc

Industrial Visit to TATA Advanced Systems. Limited on 7thDecember 2022

Objectives

- To know the manufacturing, production, and operations of the company
- To help student gain practical knowledge
- To keep students, update on the latest trends in the industries.

Date, Time & Venue

Date: 7thDecember 2022

Time:1.30 PM to 4:15 PM

Venue: TATA Advanced Systems Limited., Block-B30, #42 / 43, 1st phase, Hosur Rd, Electronics City Phase 1, Electronic City, Bengaluru, Karnataka 560100

Brief Report

Tata Advanced Systems Limited (TASL), a wholly-owned subsidiary of Tata Sons, is the strategic Aerospace and Defence arm of the TATA Group. TASL is both an operating & a holding company. Tata Advanced Systems Limited is one of the country's leading private players for aerospace and defence solutions and aspires to be the 'Partner of Choice', especially for the government's 'Make in India' programme and for global Original Equipment Manufacturers (OEMs). With the requisite capabilities, resources and scale, it is equipped to deliver end-to-end innovative solutions encompassing systems, hardware, software, technology, and digital solutions, all of which can be fully integrated across the key platforms necessary to secure India's land, sea and skies.Tata Advanced Systems Limited has a strong portfolio of partnerships and joint ventures with leading global aerospace and defence firms, making it an integral partner in the international supply chain and in some instances, a global single source provider for leading defence OEMs.

The TATA Advanced Systems was visited by 18 students of III semester along with Dr. Ramya M V&K S Mahesh, from the Department. The visit to the plant was via college bus. We arrived at TASL at 1.30 PM. We were received by **Mr. Swaminathan,**Head-Administration, who played us a short video that established TASL as a fast-emerging key defence and aerospace player in India with established capabilities and deliveries in the following areas: Missile Systems and sub-systems, Radar Systems and sub-systems, Command & Control Systems, Aerospace & Aero-Structures, Unmanned Aerial Systems, Optronic Systems, Homeland Security Solutions. We were offered a working lunch at TASL at 2 PM. After Lunch, we were taken on a tour of their facility. Firstly, we visited the PCB design facility where we are all made to wear an antistatic gown because certain parts on the PCB board are highly sensitive to even small charges of energy. All of the PCB undergo very rigorous testing to ensure no errors including X-Ray analysis of the board to check if all the connections are desirable. Later a quick tour of the other facility was done. The industrial visit came to a very satisfying end.

Outcomes

Students gained the knowledge and able to understand the following:

- Company profile& Product Portfolio
- Career opportunities

Name of the Event:Robot Exhibition

Date &Time: 11.03.2023; 09.30 AM to 4.00 PM.

Venue: ,Seminar Hall – 2, 'A' block, JSSATEB campus.

Event Coordinators: Mr. Kousik S, Dr.Mruthunjaya, M, Dr.Yogesha K B

On 11-03-2023 (Saturday), a one-day robot exhibition was held at JSS Academy of Technical Education, Bangalore with the objective of showcasing the latest advances in robotics and their potential impact on various industries. The exhibition was organized by the Department of Mechanical Engineering & Robotics and Automation Engineeringin association with IQAC. This event was conducted in the memorable of 25th sliver jubilee of JSSATE Bangalore. The event featured a wide range of robots from different manufacturers, ranging from industrial robots to humanoid robots. The program was inaugurated by Sri. Yogesh Kumar Co-Founder & CEODI FACTO, Robotics and Automation. The exhibition was attended by students, faculty members, industry experts, and the general public, who all showed a great deal of interest in the technology and its applications.

Introduction:

The robot exhibition was organized as part of the Department of Mechanical Engineering & Robotics and Automation Engineering initiative to promote technological awareness and innovation among students and the community. The event was designed to provide an interactive platform for showcasing the latest advancements in the field of robotics and to stimulate interest in the technology among students.

Exhibition Overview:

The exhibition featured various robots, each demonstrating its unique capabilities and features. The exhibition was divided into three sections: industrial robots, service robots, and humanoid robots.

The industrial robot section showcased robots used in manufacturing and industrial settings. The robots were programmed to perform various tasks such as welding, material handling, and assembly line work. The students were particularly interested in the precision and efficiency with which these robots performed their tasks.

The service robot section showcased robots designed to assist in various tasks such as cleaning, security, and healthcare. The robots demonstrated their abilities to navigate through different environments and to recognize and respond to human commands.

The humanoid robot section showcased robots designed to resemble humans and perform tasks that require human-like abilities such as speech recognition, facial recognition, and movement. These robots were programmed to interact with visitors and respond to their questions and commands.

Outcome:

The robot exhibition was a resounding success, with a large number of students, faculty members, industry experts, and the general public attending the event. The exhibition sparked interest and curiosity among visitors, with many expressing a desire to learn more about robotics and its applications.

The exhibition also provided an opportunity for students to interact with industry experts and learn about the latest trends and opportunities in the field. The event was well-received by the community and garnered positive media coverage, generating a great deal of buzz about the potential of robotics.

Conclusion:

The robot exhibition organized by the Department of Mechanical Engineering and the Department of Robotics and Automation was a great success. The event helped raise awareness about robotics and automation and generated

excitement among the participants. The JSS Academy of Technical Education intends to organize similar events in the future to continue promoting technological innovation and awareness among students and the community.

Fig 1: Inauguration of the Robo Exhibition – 2023

Fig 2: Chief Guest Interaction with the students


Fig 3: Valedictory.

Student Development Program on

**INTRODUCTION TO AUTOMATION (HANDS-ON- SESSION)**

August 22, 2022

The session was started with the blessings of Sri Shivarathri Deshikendra Mahaswamiji. Our beloved Principal Dr. Bhimsen Soragaon and Dr. Ramya M V, HOD(i/c), Dept. Robotics and Automation, JSSATEB welcomed all the participants by explaining the importance of the workshop.

Theoretical aspects of the SDP was carried in online mode by Dr. K R Prakash, Professor, Program Coordinator for Industrial Automation and Robotics & Dean Industrial Relations, Dept. of Mechanical, NIE, Mysuru by explaining the students about the importance of Automation and Robotics systems in industries. He connected the different levels of Automation in industries and explained many real-time applications to do as their projects.
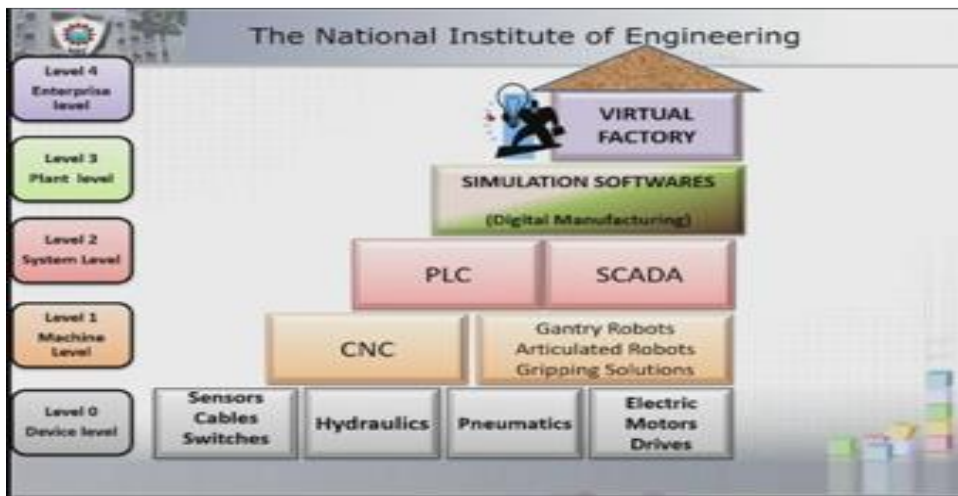
The offline session was continued with Hands-on experience by Dr. Ramya M V with CoDeSys PLC simulation software. The Hands-on session concentrated to know the basics of PLCs, difference between PLC and PC. Later the workshop carried with function of PLC CPU, I/O interface, PLC Hardwar details. It carried with simple PLC Programming, programming Timers and counters.
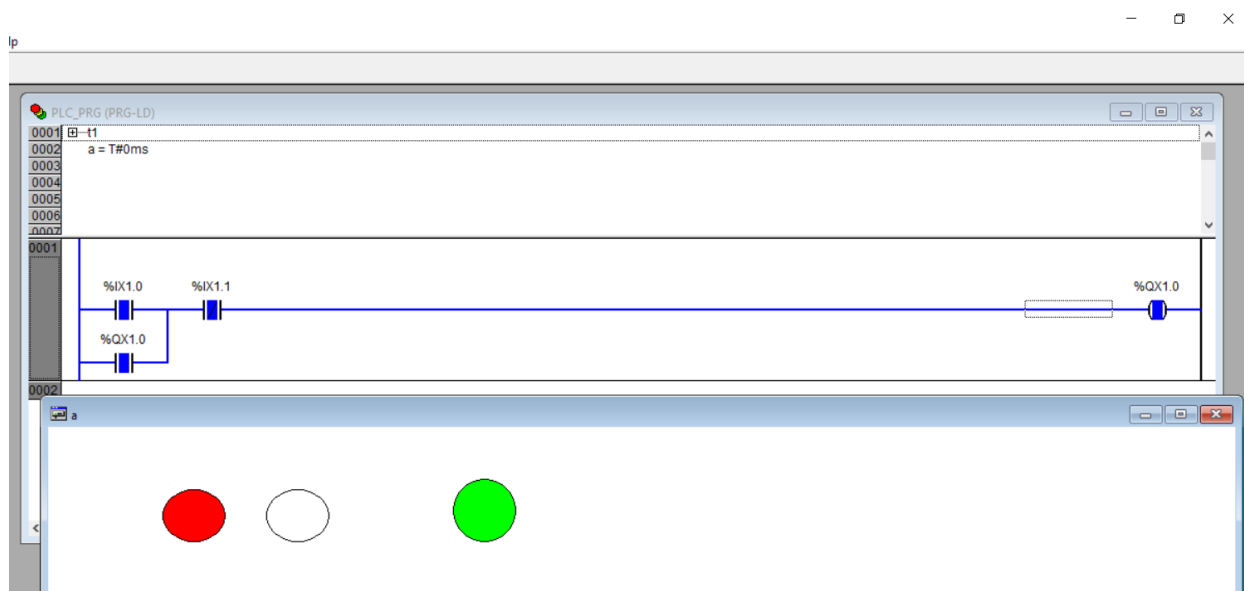
All the students were happy about their presence in the workshop and they learnt, exposed much after attending this hands-on session. They also expressed to conduct more hands-on sessions like this. The only concern they expressed to extent number of days of the workshop for two weeks or more to improve their knowledge.

Resource person for online session:

Dr. K R Prakash, Professor, Program Coordinator for Industrial Automation and Robotics & Dean Industrial Relations, Dept. of Mechanical, NIE, Mysuru.

Resource person for offline session:

Dr. Ramya M V, HOD(i/c), Dept. Robotics and Automation, JSSATEB

Student Development Program on
Virtual Reality using Unity 3D: Hands-on Session
Date: 03.11.2022
Time: 11 am to 1 pm
Venue: A110
No of Participants: 21
Faculty Coordinators: Dr. Ramya M V, HOD
Resource Person: Mr. Karthik Raj M N, R&D Engineer for DTOS, Daimler Truck Innovation Centre, India

The Department of Robotics & Automation, JSSATE, Bengaluru, organized a student development program on Virtual reality using Unity 3D, a hands-on session for III semester students. **Mr. Karthik Raj M N**, R&D Engineer for DTOS, Daimler Truck Innovation Centre, India, explained every concept of Unity 3D. Students learnt about creation of various UI components & Augmented Reality, Content Development, Virtual Reality and related concepts along with Unity 3D Software.

Unity 3D: Hands-on Session

Two Weeks Workshop on Robotic Operating System Organized by Department ofRobotics & Automation in association with NEWRO ROBOTICS
Date: 26.12.2022 to 06.01.2023
Time: 2 PM to 5 PM.

The Department of Robotics & Automation in association with NEWRO Robotics, Bengaluru, organized two weeks workshop on "Robotic Operating System" for III semester students, from 26.12.2022 to 06.01.2023, in afternoon session, from 2 PM to 5 PM

NEWRO Robotics
NEWRO Robotics is a service-based company which provides innovative solutions in the field of Robotics and Automation to any technical problem with minimum cost.

Workshop Objective
- To make the students acquainted with the conceptual as well as practical knowledge of Robotics.
- To provide exposure to the students on industry trends, cutting edge technology and interdisciplinary aspects

Outcomes

- Participants would learn about the ROS ecosystem and how to

- Use ROS to program and control robots.

- Participants will gain hands-on experience with integrating

- different ROS packages and tools to build robotic systems

Brief Report

Week 1

Day 1: Introduction

The first day of the workshop was spent on introduction to Robot Operating System (ROS) along with the applications and upper hand of employing ROS as a medium of communicating with the robot. Various sensors such and LIDAR, Gyroscope, Accelerometer, Ultrasonic sensor and their real-time applications were shown with live demonstrations.

Day 2: Programming Basics

The second day of the workshop turned out to be a tad challenging as we stepped into establishing connections between the microcontroller, Arduino UNO and the CPU. Nuances of the Subscriber and Publisher modules written in Python were explained. The Subscriber and Publisher modules essentially formed a closed execution and feedback loop. It maintained consistency between what was fed into the Bot and what was executed by it. The saving of these Subscriber and Publisher modules in a user defined workspace - CATKIN on ROS, and their execution were taught with utmost care and precision. Installation of Ubuntu Operating System and ROS on Ubuntu was a major part. Essential commands to ROS and Ubuntu were taught that helped us locate, identify and move around the CATKIN workspace with ease.

Day 3: Finer Details of the Code and Mathematics

Once the Subscriber and Publisher modules were up and running, we now moved on to the aspects of the robot that caused it to move as we wished. This included predicting and setting an accurate range for the LIDAR to detect objects in. The obstacle avoiding feature of the robot used Ultrasonic Sensors to detect obstacles and manoeuvre around them effectively using a little bit of Physics and Math.

Differential Drive- a mechanism that causes the rover to move left or right or just follow a straight path based on the feedback received by the Ultrasonic and LIDAR Sensors were explained, calculations for the rotation of the wheels solved and executed. Speeds of the wheel were estimated and set in line with the requirements. Mapping of the region in which the Bot operated were done in real-time.


Day 4: Electrical Connections and Arduino Programming

The most exciting part, the wired connections of the sensors, servo motors and other components with Arduino UNO Board were shown in detail. The pin connections, grounding and energy supply were taught. Uploading of Python programmes specific to the working of each component was done. The readings and data were double checked for consistency and accuracy. The data sets were also analysed for precision problem solving and enhancing the working of individual sensors. A vis-à-vis comparison of the Subscriber and Publisher values displayed was done thus validating the execution and feedback loop. Utmost care was taken while illustrating connections of the components to the Arduino Board as even the slightest mistake would deem the entire board redundant.

Day 5: Interfacing of Software and Hardware

All that we had learnt up till now were now being put together. The required programming for each sensor, wheel, communication connections between the microcontroller and CPU were established. Folders were created in the CATKIN workspace. Saving of Subscriber and Publisher modules in their respective folders was done with utmost care. Physical connections of the Electrical and Electronic Components to the Arduino Board were done with a hawk's eye. Each connection was scrutinized before finalizing it. The amalgamation of all these aspects was done. All of this summarizes week one of this splendid workshop
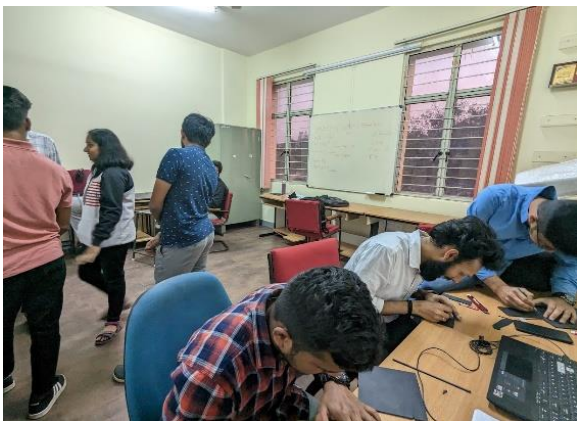
Week 2

Hands-on Session

The entire week including Sunday was spent in putting to test all the knowledge we had acquired during the past week. It included building a Bot from scratch. Starting from designing the body, to modelling a 3D form of the same using Shapr3d software, to cutting suitable parts out of the foam board in accordance with the design dimensions to smoothing the joints of the parts cut by hand- every single thing was done. The list of features to be added into the Bot was discussed with vigour and passion. Programming of Arduino and user defined functions demanded a major chunk of time. The electrical connections with varied were carried out with care. Programmes were debugged and uploaded. Calculations were checked and rechecked to achieve precision. The entire class was involved in all aspects. Painting and stickering was also much debated upon.

97
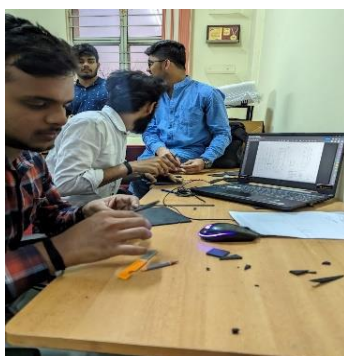
Hands-on session

Handson Workshop on 3D Printer

Date: 30.06.2023

Time: 12 to 1 pm;Venue: A109

No of Participants: 43 (19 students from 2nd sem, 15 students from 4th sem & 3 students from E&IE Dept.)

Resource Person: **Mr. Bharath M N, Assistant professor, Department of ME, JSSATEB.**

3D printing or additive manufacturing is the construction of a three-dimensional object from a CAD model or a digital 3D model. It can be done in a variety of processes in which material is deposited, joined or solidified under computer control, with material being added together (such as plastics, liquids or powder grains being fused), typically layer by layer.

3D printable models may be created with a computer-aided design (CAD) package, via a 3D scanner, or by a plain digital camera and photogrammetry software. 3D printed models created with CAD result in relatively fewer errors than other methods. Errors in 3D printable models can be identified and corrected before printing.

3D printing or additive manufacturing has been used in manufacturing, medical, industry and sociocultural sectors (e.g. Cultural Heritage) to create successful commercial technology. More recently, 3D printing has also been used in the humanitarian and development sector to produce a range of medical items, prosthetics, spares and repairs.

Theoretical &practical aspects of 3D Printerare delivered by Mr. Bharath M N, Assistant professor, Department of ME, JSSATEB.

The resource person gave a brief insight into the 3D Printer and the session was carried with hands-on. The basic and general information followed by that creating a project was carriedon the session. The project is developed using the 3D Printer.

Resource person for online session:

Mr. Bharath M N, Assistant Professor, Dept. of ME, JSSATEB.

Co-ordinator for the session:

Dr. Ramya M V, HOD, Dept. Robotics and Automation, JSSATEB.

Student Development Program on

HANDS-ON- SESSION ON VIRTUAL REALITY

February 24th, 2023

Unity is the world's leading platform for creating and operating interactive, RT3D content. Creators, ranging from game developers to artists, architects, and automotive designers to filmmakers and more, use Unity to make their imaginations come to life. The Unity platform provides a comprehensive set of software solutions to create and operate real-time 2D and 3D content for multiple platforms, including mobile phones, tablets, PCs, consoles, and augmented and virtual reality devices.

Theoretical aspects of Virtual reality were covered in the classes and to support for practical aspects we have invited Ms. Preethi S, Assistant professor, Department of EEE, NIE, Mysuru.

The resource person gave a brief insight into the virtual reality software UNITY and session was carried with hands-on. The basic and general information followed by that creating a project was carried on the session. The project developed in using the software were imported and installed in an android mobile phone.

Resource person for online session:

Ms. Preethi S, Assistant Professor, Dept. of EEE, NIE, Mysuru.

Co-ordinator for the session:

Dr. Ramya M V, HOD, Dept. Robotics and Automation, JSSATEB.

Title: Industry Interaction on "Skills Required for Robotics & Automation Engineers"

Category: Industry Interaction

Date:12.11.2022

Target audience: III Semester R&A students

No. of Resource Persons: 1

No. of Participants: 15

Organized by: Department of Robotics & Automation

Resource Persons with Designation: Ms. Suparna Guruprakash

Senior Engineer- Projects,

Schneider Electric Pvt. Ltd., Chennai

Objective

- To identify the required skills for Robotics & Automation Engineers

Report

The Department of Robotics & Automation, organized Industry interaction session on "Skills Required for Robotics & Automation Engineers" for III semester students, on 12.11.2022. Ms. Suparna Guruprakash, Senior Engineer-Projects, Schneider Electric Pvt. Ltd. Chennai, TN, delivered the talk. She highlighted the necessary skills required and the most effective way to gain the required skills.

The interaction was supplemented with hands-on learning session by Newro Robotics.
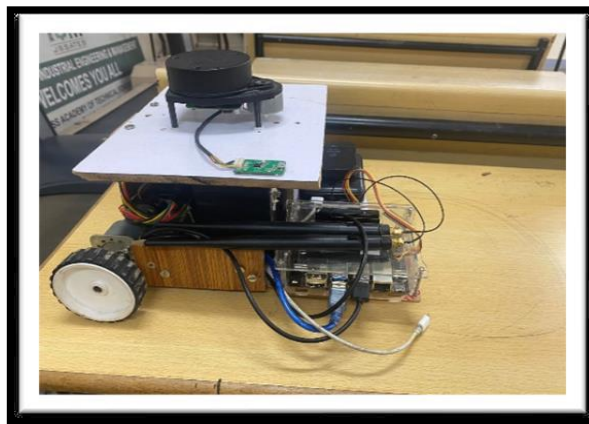
Outcomes

- The students gained deeper insights into the necessary skills required in the Robotics & Automation Field

Session by Ms. Suparna Guruprakash

Session by Newro Robotics

Demonstration session by Newro Robotics

ELECTRONICS & COMMUNICATION ENGINEERING

Seminar on "New National Education Policy-2022"

Summary of one day seminar Programme:

The Dept. of Electronics & Communication Engg., and the Dept. Computer Science and Engg. organized a One seminar on **"New National Education Policy-2022: Impacts on Future Indian Education System"** at **JSS Academy of Technical Education, Bengaluru** on **2ⁿᵈ Sep 2022**. The programme was **sponsored by Karnataka State Higher Education Council (KSHEC), GoK**

The training program was started with blessings of **His Holiness Jagadguru Dr. Sri Shivarathri Rajendra Mahaswamiji and His Holiness Jagadguru Sri ShivarathriDeshikendraMahaswamiji.**The blessing of the almighty was invoked by **Ms. Chaithra and team.**

Dr. P M Shivakumara Swamy welcomed the guests and the participants. The program was symbolically inaugurated by lightening the lamp by all dignitaries.

Dr. Mallikarjunaswamy S gave a brief introduction about the training programme and its objectives.

MrsGunasagari G S, introduced the chief guest **Dr. Venugopal K R.** explained about NEP 2022 and impact on future education system, educational system problem and progress towards better education system.

Dr. Anuradha M.G, Introduced the chief guest**Dr. T N Thandava Gowda**explained about NEP 2022, How it helpful to the institutions and university . what all the activities have been included in the NEP process

Dr. Thejaswini P, Introduced the chief guest **Dr.Satishkumar S. Hosamani.** Explained about library science and information centre has been helpful for NEP process and what all the facilities are available public libraries and libraries app

The principal **Dr.Bhimasen Soragaon** addressed the gathering about the importance of the Seminar. The programme was concluded with vote of thanks **by Mrs Pavithra G S. Dr. Anuradha M.G** was the master of the ceremony.

Inaugural programme, in presences of from left side **Dr. P M Shivakumara SwamyProf & HoD, JSSATEB, Dr. Bhimasen Soragaon Principal, Resource person.   Dr. Guru D S, Mysore University, Dr. Venugopal K R.**former **Vice chancellor, Bengaluru University, Dr. T N ThandavaGowda, Administrative Officer Karnataka State Higher Education Council, Dr. Prabhudev Jagadeesh. M.P, Prof, JSSTAEB and Dr. Mallikarjunaswamy S, Asso Prof, JSSTEB.**

Chief Guest Felicitation

Internship on "Python Programming and Data Analytics

Brief report on internship on Python Programming and Data Analytics:

The internship on Python Programming and Data Analytics was conducted in offline mode from 11th October 2022 to 15th October 2022.

Each session of 90 minutes was handled by experts including hands-on exercises for students to practice along with the workshop speakers.

The workshop resources like learning materials, source code, and other guides were made available to students during the workshop through an online repository.

Objectives:

- Learn how to use Jupyter notebooks
- Learn how to work with Num Py data types
- Be proficient in pandas Series
- Be proficient in pandas Data Frames
- Understand how to use data visualization
- Know how to import and clean data
- Introduce statistical tools for working with data sets
- Work through a complete data analysis to understand how the tools interact with each other

Outcome:

- Participants will be able to understand and use python data science libraries as a tool for data analytics
- Participants will be able to create Python codes for the above techniques
- Participants will be create visualizations using python
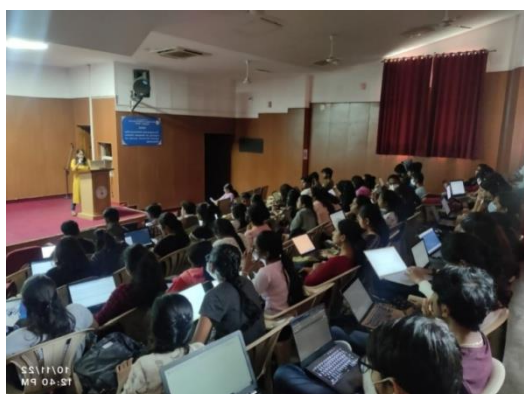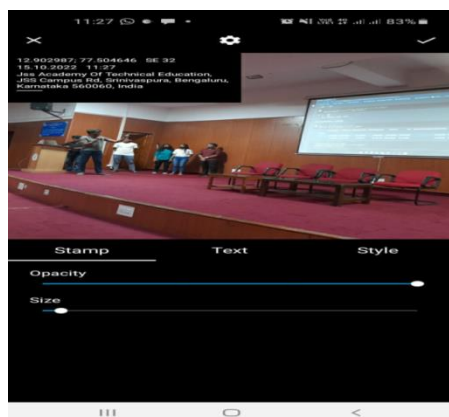
Workshop on "India's Indigenous Microcontroller Development Board VEGA Processor and Ecosystem"

Brief Report on workshop on "India's Indigenous Microcontroller Development Board VEGA Processor and Ecosystem":

Department of Electronics & Communication organized two days national level hands-on workshop on "India's Indigenous Microcontroller Development Board **VEGA** Processor and Ecosystem" in collaboration with C-DAC and IEEE India Council on 20th and 21st of October, 2022 to proliferate "VEGA processors" series of microprocessors including India's first indigenous 64-bit multi-core RISC-V based Superscalar Out-of-order Processor among the academic community. This is the first Pan India workshop on indigenous VEGA Processors for students of 2nd and 3rd year students. Maximum number of students for the workshop is restricted to Ninety.

The chief guest for the workshop is Mr. Libin T T, Scientist F, C-DAC, Thrivandrum. The guest of honor is Dr. Dr. H R Mahadevaswamy, Joint Director, Technical Division, JSSMVP.

The workshop provides a platform for the students to develop their skills in the field of developing applications using Vega Processor through Hands on sessions. The purpose is to show the practical examples on how the embedded applications are built in real time using Vega processor on ARIES board.

Workshop was organized on 20th and 21st of October 2022. The Workshop was started with a welcome note at 9.30AM on 20th October, 2022. After welcome speech, the training program was started.

The first day of the workshop was orient students towards ARIES development board and applications. Afternoon session started with hands on training with ARIES board followed by sensor interfacing to ARIES board.

The second day of the workshop covered applications of sensors interface to ARIES board, Introduction to IOT application development using VEGA processor followed by IOT application development on board. Sessions were informative and interactive.

To know the level of understanding about the VEGA processor & its applications a quiz was conducted by C-DAC team. Winners of the quiz were awarded with prizes.

Although 178 registrations were done for the workshop but 90 participants were shortlisted for the workshop. We had participants from different Colleges like KLE Technological university, Hubbli, Karanataka, Gurunanak Engineering College Bidar, Sambhrama college of engineering, SJBIT, Dengaluru, Rajarajeshwari Collgege of Engineering, Bengaluru and inhouse participants from JSSATEB. Overall the response from the participants was good. The feedback was taken and the student have expressed that more such hands on workshops needs to be conducted. The feedback analysis is attached.

We thank JSS Mahavidyapeetha Management and joint director Dr. H R Mahadevaswamy for their constant support. We thank our beloved Principal, Dr. Bhimsen Soragaon for his encouragement and moral support. We also thank our beloved HOD, Dr. P.M.Shivakumara Swamy, for his support extended for conduction of the Workshop.

Co-ordinators.

1. Dr. Thejaswini P
2. Mrs. Sunita Shirahatti
3. Mrs. Anu H
4. Ms. Gunasagari G S

Program Conveners

1. Prof. P M Shivakumarswamy
2. Prof. Aravind H S
3. Prof. D MaheshKumar

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Workshop on "PCB Design"

Brief report on the workshop on Printed Circuit Boards:

The Electronics and Communication Department (EC), conducted a workshop on Printed Circuit Boards (PCBs), and their manufacturing, in collaboration with Inovact, and their founder and CEO Mr. Sarang Pani. The workshop was spanned about 5 hours, from 10AM in the morning till 4PM in the evening. The workshop was broken into 3 sessions to ensure maximum productivity. Each session dealt with a different part of PCB production: the first session was on the digital designing of PCBs, the second session was on the conversion of the designed PCBs into a format that could be used in their manufacturing, as well as a mini-assignment of designing our own PCBs using the knowledge we had acquired in the previous session, and in the final session pre-designed PCB layouts were printed on 7cmx5cm copper-lined plates.

In the first session, the basics of PCBs, and some common software's used in designing PCBs (DipTrace and Eagle) are discussed, focusing on the more basic software (DipTrace) for easier and better understanding about various aspects of the software, as well as the usage of each in designing a PCB.

In the second session, the students were asked to upload the design onto a PCB manufacturing website (PCB Way). They were allowed use of any materials The third and final session, was hands-on session on the production of physical copies of a sample PCB. Using simple materials such as copper-lined sheets, OHO and OHP sheets, cello tape, and soft and hard sandpaper sheets. Mr. Sarang Pani demonstrated the production of the sample PCB, onto pieces of the copper-lined sheet of dimensions 7cmx5cm. The students were given similar sample PCB units, and asked to actively participate in the demonstration.

The workshop concluded with Mr. Pani giving the students important real-world advice on jobs and earning job opportunities, cumulated from his experiences from actively working from as young as his 3rd year of college.

SDP on "Python Coding with application projects and Solutions"

Brief report on "Python Coding with application projects and Solutions"

        The Department of Electronics & Communication Engg, organized a free internship programme on "Python Coding with application projects and Solutions" from 18.10.2022 to 20.10.2022

        The Inauguration of the Student Development Program was held on 18.10.2022 at 9.30 AM with Invocation song By Ms Chaitra H V and Team followed by lightning the lamp by dignitaries.

        The Welcome speech was addressed by Dr Mallikarjunaswamy S, Associate Professor, Dept. of ECE, Dr Poornima N, Associate Professor, Dept. of ECE briefed about the free internship programme respectively.

Mr . Mohan Shamanna , Founder and Mentor , M/s Indoskill, Bengaluru and Mr. Mohammed Azhar Hussain, Co-Founder and Mentor , M/s Indoskill, Bengaluru were the Guests of the SDP.

For all the sessions, attendance were taken and at the end of the program feedback was taken .

Objective:

- To enhance the programming knowledge , real time application projects and solutions
- To provide a platform for the students to interact with the industry persons
- To provide awareness on programming in Python and its applications.
- To understand the need of Python for Data Analysis.

Outcome:

Around 180 students from ECE department participated in the Student Development Program. Students were able to acquire the hands-on experience on Python programming and its solutions. Students expressed that the SDP was useful and in line with Industry requirement.

Special Lecture and Live demo of HAM radio

Report on HAM RADIO:

      Session was conducted for 3rd year students of EC. Around 60 students attended the Session. Session was based on Principles of Communication System how to transmit the inform without internet, connecting people through world, frequency band , types of antenna used, repeaters, Licences to use HAM radio were discussed in session and demonstration of communication through HAM radio.

      The session was informative and students were able to visualize the transmitter, antenna and experience the usage of HAM radio.
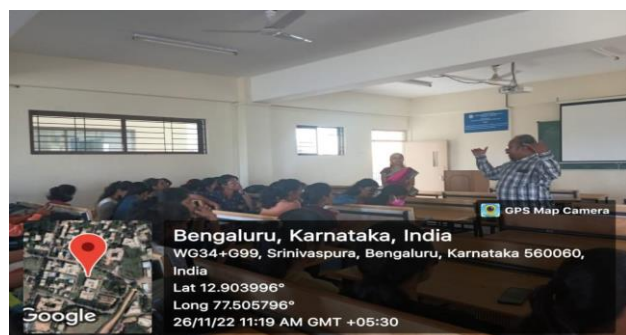
NASA SPACE APP CHALLENGE EVENT REPORT of IDEATHON -2022

Report on Ideathon-2022:

NASA International Space APP Challenge IDEATHON-2022, organized by department of Electronics & Communication Engineering, JSSATEB in association with NASA & Pravishya Tech on 15th& 16th December 2022. Around 379 students (92 batches) from various colleges of Karnataka have participated in this event.

Day 1

In the first day, the event started with registration from 9AM to 9.30AM. After the registration, Dr. Aravind H S / Dr Mahesh Kumar given introduction to the event. The morning session was continued by Ms. **PoojaTak,** Co-Founder, Pravishya Tech, Mumbai & NASA Apps, Karnataka State Lead, conducted workshop for the participants on Startup & Entrepreneurship & also she was spoken about the innovative ideas & innovative technolologies.

In First day, afternoon session, Mr. **Sandeep Ravikanti,** Co-founder, Trivent Technology, Hyderabad, addressed the gathering about innovation with Technology.

Day 2

In Day 2, the inauguration of the event was planned in seminar-hall 1. It is started with the invocation song by Ms. Sahana, 7th sem student, followed by the Lighting of the lamp by the dignitaries. After the invocation song, the welcome speech is delivered by **Dr. P.M. Shivakumaraswamy**, Head of the department, Electronics & Communication Engineering. JSS Academy of Technical Education, Bengaluru.

Lighting of the lamp is witnessed by chief guest Mr. **Sandeep Ravikanti,** Dr. **H.R Mahadevaswamy,** Joint-Director, TED, MYSURU, Ms. **PoojaTak,** Co-Founder, Pravishya Tech, Mumbai & NASA Apps, Karnataka State Lead, Dr. Bhimasen Soragaon, principal JSS Academy of Technical Education, Bengaluru. Dr. P.M. Shivakumaraswamy, Head of the department, convenors of the Ideathon-2022 event are Dr. D. Mahesh Kumar & Dr. Aravind H.S & Co-ordinators of the events are Dr. Usha S.M. Assoc. Prof. ECE Dept, JSSATEB, Dr. Mallikarjunaswamy S, Assoc. Prof. Dr. P Thejaswini P, Assoc. Prof & Mrs. Savitha A. C. Aisst Prof. ECE Dept, JSSATEB, Deans, HODs & participants from various colleges of Karnataka.

After lighting of the lamp by the dignitaries, Dr, Aravind H.S, convenor of the event briefed about the Ideathon-event, He spoken about the no. of participants from various colleges, total participants & the process of evaluation etc.,

The participants from different colleges of Karnataka 3- teams from Dayananda Sagar College of Engineering, 3-teams from DON BOSCO Institute of Technology, 1 team from HKBK College of Engineering, 2-teams from GSSS institute of engineering and technology for women mysuru, 1 team from The Oxford College Of Engineering, Bangalore, 3-teams from Kalpatharu Institute Of Technology, Tiptur were participated in Ideathon-2022 event. The Chief Guest of the event was Mr. **Sandeep Ravikanti,** Co-founder, Trivent Technology, Hyderabad, addressed the gathering about innovation with Technology.

The Guest of Honour, Honorable Director, Dr. **H.R Mahadevaswamy,** Joint-Director, TED, MYSURU was spoken about the developing technologies, Innovation, Implementation andits challenges.

Ms. **PoojaTak,** Co-Founder, Pravishya Tech, Mumbai & NASA Apps, Karnataka State Lead, briefed about the NASA Space App & its Domains such as Agriculture, healthcare, Environment, IT field and Artificial Intelligence.

The event was presided by honorable principal **Dr. Bhimasen Soragaon,** principal JSS Academy of Technical Education, Bengaluru, highlighted the significance of the Ideathon in present scenario.

Dr. Usha S.M., Assoc. Prof, ECE, Department, the event coordinator, gave a vote of appreciation following the presidential address.

Guest - Mrs. Sweatha Mallur , founder of " I Travel U" agency spoken about the travelindustry & Speaker – **Mrs. Sangeeta Kamath** spoken about the start up & entrepreneurship ideas. Another Speaker – **Mr. Bittu Bharadwaj** described about Today's world with Electronics Applications. The Guest, **Mr. Jayachandra Aradhya,** silicon Microsystems talked about the technical ideas in Electronics. **Dr. Usha S.M** was the master of ceremonies of the event.

The participants were given a tea break announcement. After the tea break, the event was begun with the mentors giving a talk to the participants about the event. This was followed by the elevator pitch, where all the registered teams who were given 2 minutes to pitch their ideas. The groups separated depending on the domains & sent to 3 rooms along with the mentors.

This was followed by lunch break after which the students had to work on their ideas with mentor support wherever needed. The mentors were from various background like cloud computing, web application development etc. the participants gained the knowledge talking with them. The mentors too appreciated their efforts. The fun session rejuvenated the students. The was followed by round of scrutiny where the teams were given 3 to 5 minutes to explain their idea chosen.

The final pitching session was conducted in seminar hall 1, where 15 teams were selected from the 92 teams. These 15 teams were asked to present again & explain their ideas. Critically these 15 teams are scrutinized posing tough questions at them. Team was exposed to strong competition. Finally 3 groups (5 students in a group) were selected as winners out of 15 groups. The winners were selected based on how they were technically sound & also based on there creative ideas and advanced topics.

As per the announcement the winners are awarded with the prizes, the first prize is gold medal with cash prize of Rs. 4000 /- , Second prize is silver medal with cash prize of Rs. 3000 /- & the third prize is Bronze model with Rs. 2000 /- cash prize. Finally 3 teams were announced aswinners.

The winners of the IDEATHON-2022 are JSS Academy of Technical Education team awarded with first prize Gold medal with Rs. 4000/- cash prize, Oxford college of engineering team awarded with second prize silver medal with Rs. 3000 cash prize and HKBK college of engineering team awarded with third prize bronze modal & Rs. 2000/- cash prize along with the certificates & T-Shorts to winners.

Event Co-ordinators:
Dr. Usha S.M. Assoc. Prof. ECE Dept, JSSATEB
Dr. Mallikarjunaswamy S, Assoc. Prof. ECE Dept, JSSATEBDr. Thejaswini P, Assoc. Prof. ECE Dept, JSSATEB
Mrs. Savitha A. C. Asst Prof. ECE Dept, JSSATEB

Kindling of Lamp by the dignitaries.

Chief Guest addressing the participants.

First pitching round by the jury people.

Second pitching round by the jury people.

HOD & Conveners awarding medal & cash prize to the winners.

Winners of the Ideathon-2022

Technical Talk on "Carrier Opportunities in Core Companies"

Report on "Carrier Opportunities in Core Companies":

Department of Electronics and Communication Engineering of JSSATEB organized **Technical Talk on Carrier Opportunities in Core Companies** on 23rd December 2022 from 12:00 PM to 1:00 PM in B Block for 5th sem students.

The technical talk speaker was Mr Abhilash, Alumnus of ECE department, pursuing masters in Electronics Engineering at Linkoping University, Sweden. He is having work experience in both software and VLSI core industry

Mr Abhilsh gave insight of carrier opportunities in core companies. He suggested students to register for vertical course. Students have to attend technical events which run in department as they are going to create awareness. As more embedded companies are recruiting fresh graduates form electronics branch.

Build your profile with your own knowledge, start up core companies creates skill set, and they give exposure towards core industry demands. As growth in VLSI domain is exponential and there is frond end and back end opportunities also and try to collect data from seniors, where they do stand in VLSI companies. Learn Verilog for FPGA's, frond end of chip, design using RTL, design verification DFT which are much in demand by core VLSI companies

Students have to enrol for NPTEL courses and have to take up some training. Providing tools to individual students in academics is not easy,. Don't deviate from your goal, as there is much advancement in silicon industry like ribbon FET.

Photographs of inauguration, Keynote, session/s and valedictory
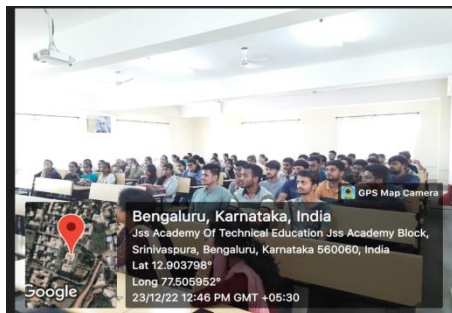
Technical Talk on "Applications of Information Theory and Coding"

Report on Technical talk on" Applications of Information Theory and Coding:

Technical talk on" **Applications of Information Theory and Coding** " was organized by the Department of Electronics & Communication Engineering, under IETE, on 14th February 23/1/23, for 5th   sem students, from 5 to 6 p.m .The speaker of the session was Mr. Prince, trainer, FICE, Vodafone.

The objective of this technical talk was to introduce students to the fundamental concepts of Information Theory and its practical application through Coding techniques. Information Theory, pioneered by Claude Shannon, is a branch of mathematics that deals with quantifying information, communication, and uncertainty. Coding techniques, stemming from Information Theory, play a crucial role in data compression, error detection and correction, cryptography, and various other fields. Information Theory and Coding techniques have revolutionized various fields by providing the mathematical foundation for effective communication, data compression, error correction, and secure transmission. From telecommunications to cryptography and quantum information theory, the applications of these concepts are vast and ever-evolving. As technology advances, the principles of Information Theory and Coding continue to shape the way we handle and transmit information in a data-driven world. Speaker gave an overview of Information Theory, discussed its key concepts, and delved into real-world applications of coding techniques across diverse domains.

Students had a pleasant interaction with the speaker and finally the students were very much benefited by the seminar in terms of understanding about the skills required for them to get into Industry.

 This programme was coordinated by Dr Veeramma Yathnalli, Assoc Prof and Dr. Thejaswini P , IETE Coordinator and a total of 50 students attend the talk. We thank our beloved Principal, Dr.Bhimasen Soragoan and our HOD, Dr.P M Shivakumaraswamy for their support and encouragement.

Invited Talk on "Importance of Up skilling and Entrepreneurship"

Report on Invited Talk on "Importance of Upskilling and Entrepreneurship":

      Mr. T S SARANG, resource person started the session with the introduction to Entrepreneurship and the do's and don'ts of entrepreneurship. He stressed on the importance of solving problems over ideas. He explained the flow of evolution from problem to product, highlighting the various stages like- Problem Validation, Market size and opportunity, minimum Viable Product and pivoting, Business model canvas, Team and mentorship and Execution.

      The speaker also threw light on the importance of upskilling for students. He explained the need for upskilling by giving the examples of AI intervention in existing jobs and layoff scenarios. He detailed the 4-step plan to upskill from scratch- explore, learn, network and master. He mentioned the importance and need of proof of work to showcase their skill set. He also explained the how to find better opportunities by leveraging proof of work. He also mentioned the importance of networking with the example of LinkedIn, to establish with smart people, peers and entrepreneurs.

      All students appreciated the talk and were enthralled to know the importance of acquiring skills required for the Industry.

Outcomes:

1. Understanding of the significance of upskilling.
2. Exposure to student entrepreneurship opportunities.
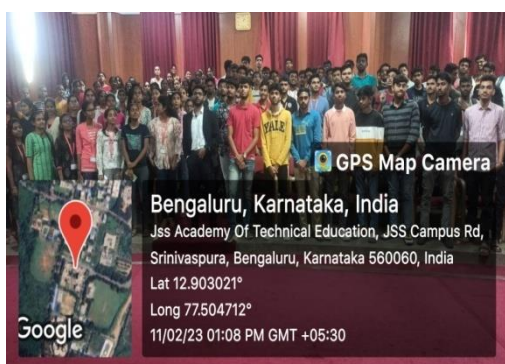
Workshop on "PCB Design"

Report on workshop PCB Design : Brief report on the sessions held on 21st Feb 2023.

The Electronics and Communication Department conducted a workshop on Printed Circuit Boards (PCBs), and their manufacturing, in collaboration with Inovact, and their founder and CEO Mr. Sarang Pani. The workshop was inaugurated by HoD, Electronics and Communication Engineering, Dr. P M Shivakumaraswamy. Mrs. Kavitha M, introduced the Resource Person, Mr. Sarang Pani to the gathering. The workshop was spanned about 6 hours, from 10.30 AM in the morning till 5.30 PM in the evening. The workshop was broken into 3 sessions to ensure maximum productivity. Each session dealt with a different part of PCB production: the first session was on the digital designing of PCBs, the second session was on the conversion of the designed PCBs into a format that could be used in their manufacturing, as well as a mini-assignment of designing our own PCBs using the knowledge we had acquired in the previous session, and in the final session pre-designed PCB layouts were printed on 7cmx5cm copper-lined plates.

In the first session, the basics of PCBs, and some common software's used in designing PCBs (DipTrace and Eagle) are discussed, focusing on the more basic software (DipTrace) for easier and better understanding about various aspects of the software, as well as the usage of each in designing a PCB.

In the second session, the students were asked to upload the design onto a PCB manufacturing website (PCB Way). They were allowed use of any materials The third and final session, was hands-on session on the production of physical copies of a sample PCB. Using simple materials such as copper-lined sheets, OHO and OHP sheets, cello tape, and soft and hard sandpaper sheets. Mr. Sarang Pani demonstrated the production of the sample PCB, onto pieces of the copper-lined sheet of dimensions 7cmx5cm. The students were given similar sample PCB units, and asked to actively participate in the demonstration.

At the end of the session, Mr. Sarang briefed the students about important real-world advice on jobs and earning job opportunities, cumulated from his experiences from actively working from as young as his 3rd year of college. The Workshop concluded with Valedictory function. Dr. Poornima N, Associate Professor delivered Vote of Thanks.

Objectives:

- To provide learning platform for students in PCB designing.
- To provide Practical exposure to students by implementing small circuits on PCB.

Outcomes of SDP:

1. Students were able to learn and design PCB.
2. Students were able to implement simple circuit on PCB.

Photographs of the workshop

Technical Talk on "Applications of Internet of Things"

Report on Technical talk on Applications of Internet of Things:

Mrs. Anu H welcomed & introduced the resource persons. Dr. P M ShivakumarSwamy addressed the students. Mr. Karthikeyn Briefed about IoT the Architecture of IoT, Agriculture iot Tea estate soil moisture, soil temperature monitoring, how to connect to the internet, to transfer data to the cloud.

Mrs. Gouri S Kategeri expressed heartfelt thanks to MrKarthikeyn. Mr. Manohar helped in maintaining discipline among students.

Outcomes:

- Students were able to learn and understand the basic architecture of IoT.
- Students were exposed to the applications of IoT in real time
- They were introduced to the various domains where IoT is applied
- Students could relate their syllabus to real-time IoT Usage.

Workshop on Cloud Computing

Report on Workshop on Cloud Computing:

Workshop on Cloud Computing by Dept. Of ECE in association with M/s Foundation for Innovation and Collaborative Education (FICE), VOIS (Vodafone Intelligent Solutions).

Day 1

Theory - Introduction to Cloud Computing & Introduction to Azure

Practical – Completion of _VOIS for Tech LMS Course track having small assessment (QUIZ) to check understanding and knowledge base of the participants.

Day 2

Theory - Azure Services, Azure Service Models & Introduction of Virtual Machine,

Practical – Creation of Virtual machine on Azure Portal (Windows server & Windows 10 pro)

Day 3

Theory – Introduction to Databases (SQL & NoSQL), Introduction to IOT

Practical - Creation of SQL Database in Azure portal, attaching a table & showing the data in Azure Portal, creating a IOT hub in Azure Portal & Connected it with the raspberry pi Simulator

Objectives:

- The workshop will provide an opportunity to learn and build foundational skills in cloud computing used in industry application areas.
- The workshop is focused on skill development to apply the learning for designing cloud hosted applications

Outcomes:

At the end of the program, participants will be able to become proficient with Cloud Computing concepts.

- Use cloud core services for developing secure infrastructure of cloud hosted applications.

- Understand and experience in building real-world solutions using cloud environment

- Transform on-premises application and infrastructures to cloud hosted environment for applications and data.

- Learn concepts of IoT using cloud environment

Day1 Session on Fundamentals of Cloud Computing

Day 2 Session: Creating Azure Account and Virtual Machine on Cloud

Day 3 Session: SQL data server on cloud

Invited Talk on "The Blueprint for Success: Strategies for Career Development and Placement Opportunities"

Report on "The Blueprint for Success: Strategies for Career Development and Placement Opportunities:

Mr. **Ajay Murdeshwar**, resource person started the session with the introduction to Entrepreneurship and the do's and don'ts of entrepreneurship. He stressed on the importance of solving problems over ideas. He explained the flow of evolution from problem to product, highlighting the various stages like- Problem Validation, Market size and opportunity, minimum Viable Product and pivoting, Business model canvas, Team and mentorship and Execution.

The speaker also threw light on the importance of need for Career Development and Placement Opportunities for students. He explained the need for upskilling by giving the examples of AI intervention in existing jobs and layoff scenarios. He detailed the 4-step plan to upskill from scratch- explore, learn, network and master. He mentioned the importance and need of proof of work to showcase their skill set for career development and also placement opportunities. He also explained the how to find better opportunities by leveraging proof of work. He also mentioned the importance of networking with the example of LinkedIn, to establish with smart people, peers and entrepreneurs.

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All students appreciated the talk and were enthralled to know the importance of acquiring skills required for the Industry.

Objectives:

- To create awareness amongst the Engineering students about need for Career Development and Placement Opportunities
- To impart the knowledge about the Student Entrepreneurship.

Outcomes:

- Understanding of the significance of Career Development and Placement Opportunities
- Exposure to student entrepreneurship opportunities.

Photographs of session (with captions)

Mr. Ajay Murdeshwar presenting to the audience.

SDP on "Basics of Cloud Computing and Microsoft Azure Implementation by VOIS"

Report on "Basics of Cloud Computing and Microsoft Azure Implementation by VOIS":

The Student Development Program was organized by The Department of Information Science and Engineering, JSSATEB on 23rd and 24th of June 2023 in collaboration with '_VOIS for Tech: University Engagement Program. Dr. Rekha P M welcomed Mr.Yogesh Raje and all Participants. Speaker Introduction was presented by Vishnu B V, Third year student.

Total of 100 students registered for the workshop.

The main focus of the SDP session was to help students get the basics of cloud computing and Microsoft Azure implementation, which was organized by VOIS. The SDP session was a highly informative and practical event. The workshop aimed to provide participants with a comprehensive understanding of cloud computing concepts and practical experience in implementing various endpoints using Microsoft Azure. The attendees were also given hands-on training on creating virtual machines, Azure databases, and remote IoT systems. In addition, the participants were

provided with $300 worth of credits in their Azure accounts, allowing them to host websites and gain real-world experience during the workshop. At the end of the workshop, participants were awarded two certificates: one for completing the basics of cloud computing and another for Azure databases.

Overall, the workshop provided a comprehensive introduction to cloud computing and practical training on Microsoft Azure implementation. The hands-on exercises, generous Azure credits, and certificates offered by VOIS contributed to the participants' learning outcomes and helped them build a strong foundation in cloud computing and Azure services.

Students gave positive feedback about the insights, knowledge gained from the hands on sessions.
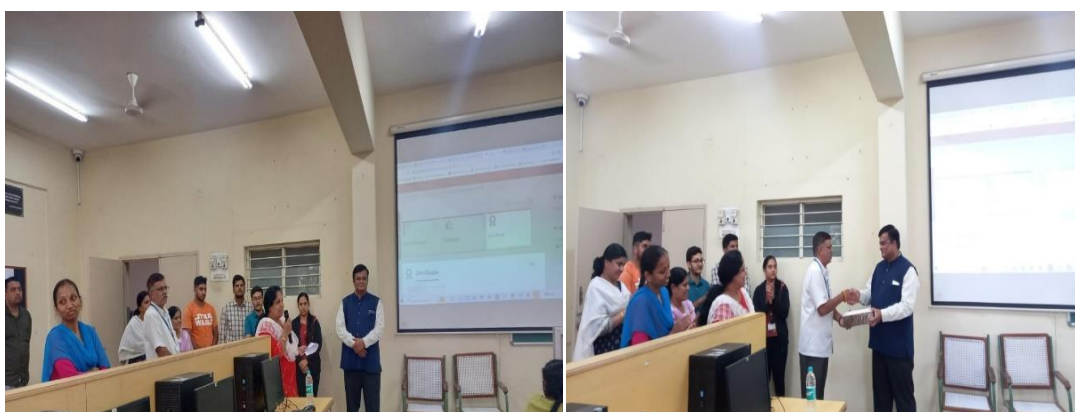
Finally, the workshop was concluded on 24th June 2023, where the speaker expressed his appreciation for The department of Information Science and Engineering and also expressed his gratitude for the college for hosting

the 2-day long workshop. Head of Department of Information Science and Engineering Dr. Rekha P.M felicitated the speaker on behalf of the Department staff and students.

Dr. P M Shivakumarswamy, Head of the Department, along with the coordinators Dr. VeerammaYatanalli and Dr. Saroja S Bhusure coordinated the SDP and tookthe responsibility of inviting Speakers as well arranging for hands on session.

We would like to thank the JSS Mahavidyapeetha, Management, Principal all the teachingand non-teaching staffs who has extended their support for making the Student development program successful.

SDP on "Hardware Security"

Report on "Hardware Security":

Department of Electronics & Communication organized Two days hands on workshop on " Hardware Security" was organized from 2nd June 2023 in association with IETE student chapter. The resource person was Mr. Vivekananda G, Research scholar, IIT Guwhati. The workshop was organized for 2nd semester students. Total of 45 students of 2nd sem attended the workshop

The chief guest for the workshop was Dr. P M Shivakumaraswamy and the resource person was Mr. Vivekananda G, PhD Scholar, IIT Guwahati.

The workshop provides a platform for the students to develop their skills in the field of developing applications using Vega Processor through Hands on sessions. The purpose is to show the practical examples on how the embedded applications are built in real time using Vega processor on ARIES board.

The objective of the workshop was to orient students towards understanding the need for logic locking in hardware security, Different types of network threats and basics of logic locking in Integrated circuits.

We thank JSS Mahavidyapeetha Management and joint director Dr. H R Mahadevaswamy for their constant support. We thank our beloved Principal, Dr. Bhimsen Soragaon for his encouragement and moral support. We also thank our beloved HOD, Dr. P.M.Shivakumara Swamy, for his support extended for conduction of the Workshop.

SDP on "Hardware Security and Logic Locking"

Report on "Hardware Security and Logic Locking":

Department of Electronics & Communication organized Two days hands on workshop on " Hardware Security and Logic Locking" was organized from 2nd to 3rd June 2023 in association with IETE student chapter. The resource person was Mr. Vivekananda G, Research scholar, IIT Guwhati. The workshop was organized for 6th semester students. Total of 40 students of 6th sem attended the workshop

The chief guest for the workshop was Dr. P M Shivakumaraswamy and the resorce person was Mr. Vivekananda G, Research Scholar, IIT Guwahati.

The workshop provides a platform for the students to develop their skills in the field of developing applications using Vega Processor through Hands on sessions. The purpose is to show the practical examples on how the embedded applications are built in real time using Vega processor on ARIES board.

The first day of the workshop was to orient students towards understanding the need for logic locking in hardware security, Different types of network threats and basics of logic locking in Integrated circuits.

The second day of the workshop was hands on session on building logic locking circuits for a particular application and verifying its functionality using python. Sessions were very informative and interactive.

To know the level of understanding about the VEGA processor & its applications a quiz was conducted by the resource person in between the sessions. At the end of the workshop feedback was taken.

We thank JSS Mahavidyapeetha Management and joint director Dr. H R Mahadevaswamy for their constant support. We thank our beloved Principal, Dr. Bhimsen Soragaon for his encouragement and moral support. We also thank our beloved HOD, Dr. P.M.Shivakumara Swamy, for his support extended for conduction of the Workshop.

Workshop on "MATLAB"

Report on MATLAB Workshop:

 "MATLAB Workshop" is a training program for the 4th semester students. The training Course provides a platform for the students to develop their skills using MATLAB through various tool boxes available in MATLAB. The purpose is make students familiar with the MATLAB tool.

The workshop was organized on 24th July 2023. The training program was started with a welcome note at 11AM by Dr. S T Veerabadrappa, Associate professor, Department of ECE. After the welcome speech, the training program started and Mr. Avinash Vulasa, Application Engineer-UPT Technology Solutions Division, CoreEL Technologies briefed about the uses and applications of MATLAB and taught students to install the software and also use it online. He also assisted students to download the MATLAB app in the mobile and gave basic usage instructions of MATLAB and simulink. Later the session was breaked for the lunch at 1PM.

Post lunch lesson was started at 2PM with the MATLAB online course where the students were able to learn and get certificates on line for "Matlab onramp course" and "simulink online course". The students were given hands on training on using the sensors on the mobile like acceleration, angular velocity, position and orientation and using the real time data provided for further processing. The session concluded with the vote of thanks by Dr. Anuradha M G, Assistant professor, Department of ECE at 4.30PM.

There were 165 participants for the training program from 4th semester. The students have expressed that more such training programs needs to be conducted.
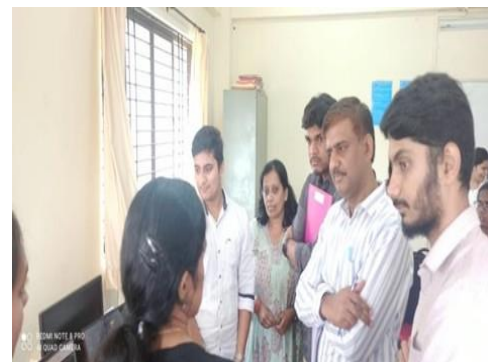
We thank our beloved Principal, Dr. Bhimsen Soragaon for his moral support. We also thank our beloved HOD, Dr. P.M.Shivakumara Swamy, for his support for the training program.

Photos of the event

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Open Day Project Exhibition

Name of the Event : " CAE simulations and case studies"

Date & Time : 02.07.2022&10.30 AM to 12.30 PM

Venue : Room A118, 1st floor 'A' block, JSSATEB campus

Number of Participants :42 Students + Staff

Speaker Name: Mr. Sandeep Palaksha

Event Coordinators: Dr Yogesha K B and Dr Gowreesh G S

A one-day technical talk on "CAE simulations and case studies" was organized by team Tachyon Motorsport in Room A118 in 'A' block of JSSATEB campus on Saturday, 2nd May 2022 at JSS Academy of Technical Education, Bengaluru. Pruthu Manderwad (Team member, Tachyon Motorsport) welcomes the guest Mr. Sandeep Palaksha and introduced the programme to all audiance.

The technical talk was chaired by Mr. Sandeep Palaksha, Lead CAE in Hussman, a Panasonic company. The main purpose of this technical talk cover a wide range of technical concepts and innovative ideas to create and analyz the design of various products, how a technology or process works, to how to perform a specific task, to lessons learned in a project, latest trends and latest technologies used in industries regarding all- round development of students.

On account of the technical talk on "CAE simulations and case studies" the resource person spoke briefly about what a CAE analyst's role is in a company. The speaker explained about the departments in a company, the flow of a job in a company. Mr. Sandeep Palaksha explained in a very clear way about the various products his company offers and the work gone into producing a new model of refrigerator from scratch.
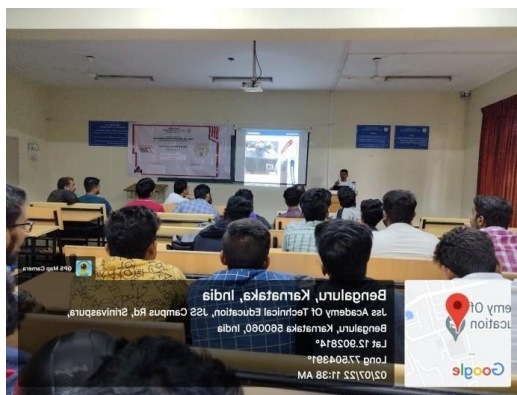
Title: Two days workshop Student Development Programme (SDP) on **"Geometrical Dimensioning and Tolerancing (GD & T) and Employability skills"** under "**Dr. B T Nijaguna Memorial Expert talks series"**

Date:25th& 26th July 2022

Timings: 10:00 AM to 4:00 PM on 25th& 26th July 2022

No of Participants: About 51 students from 4th, 8th semester of our institute and other institutes

Two days workshop Student Development Programme (SDP) on **"Geometrical Dimensioning and Tolerancing (GD & T) and Employability skills"** was arranged by the department of Mechanical Engineering on 25th& 26th July 2022 from 10:00 AM to 4:00 PM at Seminar Hall-01 as a part of '**Prof. B T Nijaguna Memorial Expert Physical talks**' lecture series, honoring the founder principal, JSSATE, Bangaluru.

Resource personsMr. Palaniyappan Kailasham**,**Training and Development, Prolotek Technologies Private Ltd, Bengaluru -560098**,** is invited to deliver the talk.

Mr. Palaniyappan Kailasham delivered the talk on 25th and 26thJULY 2022 in four sessions. On First day of work shop SDP on 25th July 2022, session 01 from 10:00 AM to 12:30 PM the delivered talk was about Current Trends for Mechanical Engineers, Career Planning and Development Strategy, Skills Mapping followed by hands on experience and project based learning activities. Session 02 from 1:00 PM to 12:30 PM the talk was about Essential Skills for Design Engineering Professionals, Best Drawing Practices and hands on experience and project based learning activities.

On Second day of work shop SDP on 26th July 2022, session 03 from 10:00 AM to 12:30 PM the delivered talk was about Introduction to Geometric Dimensioning and tolerancing (GD&T), Discussion of Coordinate tolerancing methods and its disadvantages, Exercises on GD&T. Session 04 from 1:00 PM to 12:30 PM the talk was about Important concepts of GD&T, Applications of GD&T, Exercises on GD&T.

. **"OPPORTUNITIES IN OVERSEAES HIGHER EDUCATION"**
TALK HELD ON 27.10.2022

The Department organised awareness talk on thursday, 27th Oct. 2022 in Academic Block – A011 (class room), from 12 noon to 1 PM for 5th and 7th sem students. The main purpose of the talk is to give an awareness about the opportunities that exist overseas for pusuing higher education. This helps the students who are interested to study abroad for higher education. The below photographs show some of the pictures taken during the programme conduction.

The programme started at 12 noon by welcome to the speaker Mr. Harish, Executive, Smot Pro academy by Dr Venkatesh B N. Around 60 students participated in the talk. The speaker explained in detail the benefits, challenges and the procedure for filing and processing the applications to make higher education. As per the student's wish, he explained the the whole procedure of applying, processing and support for stay, study, scholarships and stay back period by taking Germany as a study center. The students interacted well with the speaker and expressed their happiness and usefulness of the programme conducted. Finally, the talk concluded with the vote of thanks by Prof. Umamaheshwar Hebbal.

"Students Entrepreneur Awareness Workshops Report"

. **held on 09TH & 10TH November 2022**

Department of Mechanical Engineering, JSS Academy of Technical Education and JSSATE- STEP is jointly in association with GiGA innovative center, Bengaluru. organized Two days of "Students Entrepreneur Awareness Workshops" Held on the 09th & 10th of November 2022.

The first-day first session is on 09th November 2022, from 10.30 am to 12.30 PM Students Entrepreneur Awareness workshop is Organized for information science and engineering and computer science engineering (AL&ML) students for all the semesters. Dr. Deepthi sunmugaum was welcome the speaker Mrs. Geeth Ramamurthy, Mr. Suresh Kumar and Kavyashree from GiGA innovative center and students. A total of 161 students participated in Seminar Hall 1

Mrs. Geeth Ramamurthy, CEO. GiGA innovative center, Bengaluru explains the introduction and differences between entrepreneurship, business, innovation, and startup. How this helps influence on Indian economy to the students more than an hour. Next Kavyashree conducts some activities for the students which will help with decision-making on a problem. Mr. Suresh Kumar presents to students about different types of enterprises and government schemes to encourage startups.

Finally, all 3 members of GiGa innovation center interacted with students.

The first-day second session is on, 09th November 2022, from 2.00 PM to 04.00 PM Students Entrepreneur Awareness workshop Organized for computer science engineering and Master of Business Management (MBA) students are attended. Mrs. Geeth Ramamurthy, Mr. Suresh Kumar and Kavyashree from GiGA innovative center

conducted the Students Entrepreneur Awareness Workshops and activities as a morning session. A total of 20 students participated in Seminar Hall

The second-day first session is on, 10ᵗʰ November 2022, from 10.30 AM to 12.30 PM Students Entrepreneur Awareness workshop Organized for Mechanical Engineering, Automation and robotics, Electronics and Communication Engineering, Electronic and instrumentation engineering and Civil Engineering students attended by Mr.Nagesh Jayaram present online ABOUT opportunity to Entrepreneur from GiGA innovative center conducted the Students Entrepreneur Awareness Workshops and activities. A total of 123 students participated

The outcome of Two days of Student's Entrepreneur Awareness Workshops is as follows.

- Provide an opportunity for the students to become an entrepreneur and start a company.
- Awareness about entrepreneurship and ways and means to become an entrepreneur
- knowledge of the different environments to thrive and become a successful entrepreneur
- Learning from the experts about their life journey as an entrepreneur
- Interactive sessions posting problems and mapping the creativity of the students to think like an entrepreneur
- The narration of various business/entrepreneurship entities and models.

. **Industry Visit: PSSK (MRN sugar) Industry**

Date : 22.11.2022

Event: Industrial Visit to **PSSK (MRN sugar) Industry,** Darasaguppe, Pandavapura, Mandya

Faculty co-coordinators: Prajwal M & Dr. B N Venkatesh.

Students: VII sem students;

No. of students attended: 30

PSSK (MRN sugar) Industry - Company Profile

This cooperative factory was started in 1959 by B.Y. Nilegowda and the sugarcane farmers of Pandavapura,

Srirangapattana, and KR Pete Taluk have been dependant on this factory since then. The factory, which was running smoothly with the cooperation of farmers till 2003 suffered losses due to Visvesvaraya Canal modernization as water from KRS stopped for a year and sugarcane supply got affected. After that year, the factory was leased to Kothari company for a period of 7 years to run. Recently Sugar industry in taken for lease for 40 years from Murugesh Nirani group.

7th semester, Mechanical Engineering, 30 students visited **PSSK sugar Industry,** Darasaguppe, Pandavapura, Mandya **Dist.** on 22nd November 2022.

We left for PSSK sugar Industry at 8:30 AM from the Kengari railway station and reached the Plant by 10:30 AM. The Plant had different units for the crushing and extraction of cane juice followed by thermal power plant. Thermal power plant is run by the burning of bagasse. The power generated is more than enough to run complete plant.

Different level of heating of sugar cane juice in different boilers followed by liming and mixing with Sulphur di oxide. Followed by filtration and cleaning and bleaching.

Cooling of thick juice to crystals is done by forced circulation of air. Ultimately the bagging of sugar is done. Also visited the water treatment plant before letting water in to the stream. By product of sugar industry is also more valuable like Molasses and bagasse are collected and transported.

Industrial tour was ended by 1:30 pm.

. **Industry Visit: Ace Manufacturing Systems Ltd., Bengaluru**

Course/Course code: Computer Aided Design and Manufacturing (18ME72)

Date : 03.12.2022

Event: Industrial Visit to **Ace Manufacturing Systems Ltd., Peenya Bengaluru**

Faculty co-coordinator: Mr Nagaraja T K.

Students: VII Sem students;

Ace Manufacturing Systems Ltd - Company Profile

Ace Manufacturing Systems Ltd., is one of the largest CNC machine tool builders in India. It was started by Mr. P Ramadas in 1994, along with promoters of Ace Designers Limited. The company has expertise in

manufacturing CNC Vertical Machining Centers, Horizontal Machining Centers, Twin Spindle Machining Centers and Drill Trap Machining Centers. AMS also offers tooled up, jigs & fixtures and automation manufacturing solutions centered around these products. Ace Manufacturing Systems Ltd has three manufacturing plants in Bengaluru.

7th semester, Mechanical Engineering, 12 students visited **Ace Manufacturing Systems Ltd., Peenya Bengaluru** on 3rd December 2022.

We left for Ace Manufacturing Systems Ltd, Peenya at 1:00 PM from the college campus and reached the Plant by 2:30 PM and we were offered refreshments before we got a tour of the manufacturing plant. The Plant had different units for the manufacture, finishing and assembly of different types of CNC Machine. The first unit had the manufacturing, assembly and testing area where a machining components, spindle, horizontal column, ball screw assembly etc., The shop floor in-charge gave a brief on the working and assembly of CNC components in the shop floor.

The second unit in the plant was a totally house of CNC machines and CNC components where the components were inspected and assembly was taken place, the unit in charge explained how the CNC is programmed to fed for testing all operations and processes. Finally the tour of the plant came to an end.

Mr. Rahul was HR representative given all the information about the plant and instructions to the students. Mr. Chethan who had accompanied us throughout the tour of the plant, thereby we had come to an end of our plant visit, then we have started our journey back.

We reached back to the campus by 5:30 PM where we all dispersed.

The expert talk on **"Thermal management of electronics: Advanced cooling techniques"** was organized in the Department of Mechanical Engineering for students and staff on 8 Dec 2022 from 10.15 AM to 12.30 PM in the bigger class room A102. The speaker is the Dr. P Srikrishna, Scientist F, Microwave Tube Research and Development centre, DRDO, Bengaluru, delivered talk in person. The seminar was attended by 81 participants including the staff and the students of 5th and 7th semester students. The speaker had ME and PhD from IISc Bengaluru, currently working at BEL unit, Bengaluru. Dr. Prashantha B G, Department of Mechanical Engineering introduced the guest and Dr. Anil Kumar S welcomed the guest with bouquet. The speaker delivered the brief

overview of the laws of thermodynamics and its applications in the real world. He explained the importance of insulating materials used in real world coolers. He quoted that the first best insulating material is the vacuum and the second best insulating material is the dry air. The creating vacuum is comparatively difficult, and costly process compared to the air is used as insulating material in all the real world thermal flasks with multi-layered super insulation for avoiding heat transfer. The speaker also addressed the working principle of Thermo-electric coolers and heat pipes both theoretically, and with hands on experience to both students and staff. Both students and staff interacted with the speaker and cleared all the doubts regarding the above said topics. He iterated the use of heat pipes and its effectiveness in the modern heat pipes to improve the performance of the systems. Also the both students and staff interacted with the speaker about the job opportunities for the young engineers, short term training, and internship and scope for doing project work in association with the DRDO unit. The department HOD discussed the plan of organizing FDP with the speaker for all the staff of Department of Mechanical Engineering, across all the colleges at the national level. The talk was organized by Dr. Prashantha B G, and H B Marulasiddeshi. The talk was concluded with the vote of thanks.
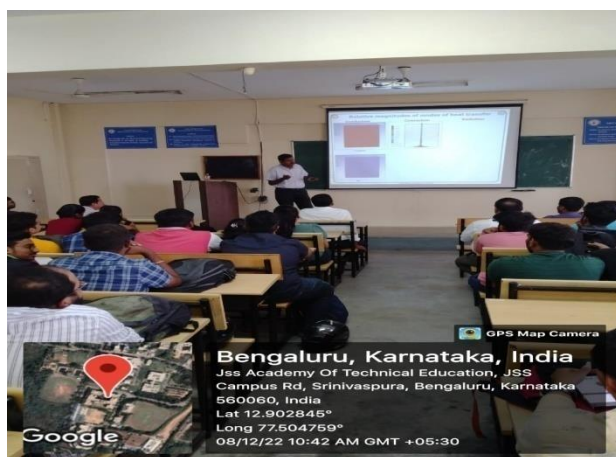
. **Date & Time**: 10.12.2022; 10:30 am – 12::30 pm

Topic: Invited Talk on "Opportunities for Mechanical Engineers in Aerospace"

Name of the alumnus: Mr. Jayaprakash A J, Innovation Lead, Aerospace Vertical, Tata Consultancy Services, Bengaluru.

Target audience: III, V & VII Sem Mechanical students with staff

No. of students attended: 55

Event Coordinators: Dr YOGESHA K B

Mr. Jayapraksh A J has spoken briefly about their company "Tata Consultancy Services (TCS)" is an Indian multinational information technology (IT) services and consulting company with its headquarters in Mumbai. He has been highlighted the significance of Mechanical Engineers in the field of Aerospace industry and its important role in the present world manufacturing industries. Also he was deliberated on design process of aircraft like Aerospace product life cycle, design specifications, conceptual design, preliminary design, detailed design fight testing, CAD model, CAM and PLM. Speaker has suggested to all the students to learn any one the software like

Solid works, Catia, Uni-graphics, Ansys, Nastron, Hype rmesh, Pro E, Abaqus, ADAMS, etc to get many opportunities in field of Aerospace industry. Also lot of research and innovation is going on in India and outside India. Hence more opportunities is available for mechanical engineering students.

He suggested that, any industry expected from young talented students strong Engineering Fundamentals, Selection of Appropriate Electives, Selection of Academic and Iindustry projects, knowledge and skill of latest software tools, Programming Knowledge (Pascal, Java, Python, etc), automation skills, Good communication Skills, etc

Also address the Design thinking process is a non-linear, iterative process that teams use to understand users, challenge assumptions, redefine problems and create innovative solutions to prototype and test. Involving five phases—Empathize, Define, Ideate, Prototype and Test—it is most useful to tackle problems that are ill-defined or unknown. He answered the queries raised by the students.
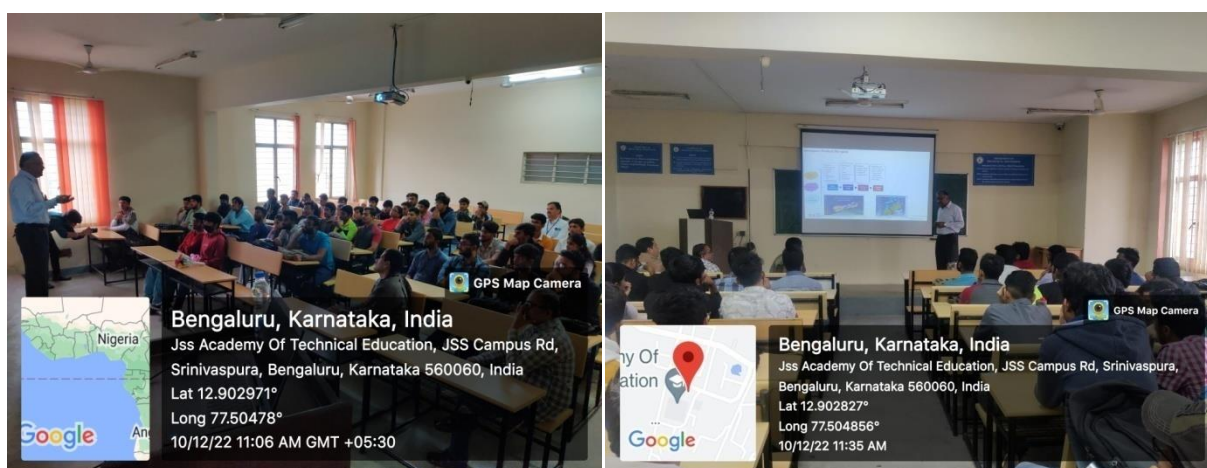
The expert talk on **"Job opportunities in Heating ventilation and Air conditioning"** was organized in the Department of Mechanical Engineering for students and staff on 12 Dec 2022 from 11.30 AM to 1.00 PM in the Seminar Hall-1 in academic block-A. The speaker is the Mr. Asif -MEP Engineer, Prinston Smart Engineer, New-Delhi, Founder, delivered talk in person. The seminar was attended by around **50** participants including the staff and the students of 3rd, 5th and 7th semester students. The speaker had good working experience in United group Limited, Doha, Qatar, Maintenance engineer, Design Engineer and Purchase & Procurement Engineer. Dr. Gowreesh, Department of Mechanical Engineering introduced the guest. The speaker delivered the brief overview of the laws of thermodynamics and its applications in the real world. He explained the importance of insulating materials used in real world coolers.

He stated First and foremost, HVAC stands for heating, ventilation, and air conditioning. This system provides heating and cooling to residential and commercial buildings. You can find HVAC systems anywhere from single-family homes to submarines where they provide the means for environmental comfort. Becoming more and more popular in new construction, these systems use fresh air from outdoors to provide high indoor air quality. The V in HVAC, or ventilation, is the process of replacing or exchanging air within a space. This provides a better quality of air indoors and involves the removal of moisture, smoke, odors, heat, dust, airborne bacteria, carbon dioxide, and other gases as well as temperature control and oxygen replenishment.

He quoted Where feasible, use central HVAC air handling units (AHUs) that serve multiple rooms in lieu of unit ventilators or individual heat pumps. Although there are many different types of air handling units, for general IAQ implications in schools, air handling units can be divided into two groups: unit ventilators and individual heat pump units that serve a single room without ducts; and central air handling units that serve several rooms via duct work. Some manufacturers offer "partial bypass" carbon filters and carbon impregnated filters to reduce volatile organics in the ventilation air of office environments. Gaseous filters must be regularly maintained (replaced or regenerated) in order for the system to continue to operate effectively. Finally he stated that, there are more opportunities in HAVAC system is getting by learning courses and internship with the companies they are in specialization with HAVAC. The talk was organized by Mr. Marulasiddeshi H B and Dr. Gowreesh S, The talk was concluded with the vote of thanks.

. **Title:** One day workshop on **"Additive Manufacturing and its advanced applications"** under the series of **Prof. B T Nijaguna Memorial Expert Physical talks'**

Date: 14th December 2022

Timings: 10:00 AM to 4:00 PM on 14th December 2022

No of Participants: About 50 students from 3rd, 5th & 7th semester of Department of Mechanical Engineering, JSSATE, Bangalore

One-day workshop on **"Additive Manufacturing and its advanced applications"** was arranged by the department of Mechanical Engineering on 14th December 2022 from 10:00 AM to 4:00 PM at Seminar Hall-01 as a part of '**Prof. B T Nijaguna Memorial Expert Physical talks**' lecture series, honoring the founder principal, JSSATE, Bangaluru.

Resource persons **Mr. Raj Kumar,** Application and Sales Manager (Additive Manufacturing) & **Mr. Shane Alam,** Sr. Executive Engineer A.M. Division called 4D Simulations a unit of Adroitec Information Systems Pvt. Ltd, are invited to deliver the talk.

The event started by welcome speech given by **Dr. Anil Kumar K.S.,** Asst. Prof., Dept. of ME, invited speakers, Principal, HOD-ME and the students and followed briefing about the workshop by **Dr. Anil Kumar K.S.,** Dr. Ashok D.V, Professor, Dept. of ISE, and Dr. B.V. Raghavendra, HOD of ME, addressed the students gathering.

Mr. Raj Kumar delivered the talk on 14th December 2022 in four sessions. In session 01 from 10:00 AM to 11:15 AM the delivered talk was about Corporate Introduction about Adroitec, Introduction to the AM Technology, Role, Cost Economics and Advantages of Adoption of Technology

Market Situation and Scope Globally Mapping followed by hands on experience and project based learning activities.

Session 02 from 11:30 AM to 1:00 PM the talk was about All AM Technologies & Scope of every technology and Demonstration of 3D Printing Machine and 3D models.

Session 03 & 04 from 2:00 PM - 4:00 PM the delivered talk was about Associated Technologies: 3D Scanning/Reverse Engineering, DFAM: Topology Optimization, Parts Consolidation, Parts Integration etc., Industries & Application: Automotive, FMCG, Aerospace, UAV, Dental, Medical, Prosthetics, Civil & Architectural, Fashion & Footwear, End Used Parts, Tooling followed by Questions & Answers (Q&A).

About 50 students from 3rd, 5th & 7th semester of Department of Mechanical Engineering, JSSATE, Bangalore, Faculty members of the ME department were present during the one day workshop. The session was interactive and students are enlightened with the 3D printing different concepts of Techniques and demonstration. The program concluded with vote of thanks by Dr. Anil Kumar K.S., Asst. Prof., Dept. of ME, JSSATE Bengaluru.

. **A REPORT ON TECHNICAL INVITED TALK** ON "PROJECT IDEAS IN LASER BED FUSION" BY DR.T. RAM PRABHU, SCIENTIST E & JOIN DIRECTOR, DRDO, BENGALURU. IS ORGANIZED ON 17.12.2022 AT 11.00 AM

The Department organised a technical talk on thursday, 17th December 2022 at 11.00AM in seminar hall 1 for Mechanical Engineering & automation and robotics engineering students. The technical talk started at 11:15 AM by welcome the speaker Dr T.Ram prabhu, Scientist E & Join Director, DRDO, Bengaluru by Dr Siddappa P.N, around 78 students participated in technical talk, the speaker Dr T.Ram prabhu explain about Metal 3D Printing - PhD and Project Proposal Funding Ideas (Specific to Aerospace), Advantages, disadvantages and challenges of metal 3D Printing. He brifed about materials used produces to Aerospace coponents and its application. He also

brifed about R&D and project proposal thrust areas in metal 3D print areas to the departmental faculty..This session was intractive and interested . Lastly he clarify the studnts questions. The vote thanks was presanted by Dr Siddappa P N. and the session concluded at 1.00pm.

Visited Industry: M/s. Rajamane Industries Pvt. Ltd, Dabaspete, Karnataka

. **Students present**: 3rd Semester (29 members)

Co-Ordinators: Dr. Siddappa P.N. & Dr.J.S. Srikantamurthy, Asst.Professor,

Facilitated by: Mr. Manjunath, Indian institute Foundrymen, Bengaluru

Rajamane Industries are India's largest Coolant Pump Manufacturing Company, with a backward integrated foundry. The Company is a Large Volume Auto-Electric component manufacturer This Industries has the expertise to Design and Manufacture BLDC motors for EV applications. **ISO 9001:2015** certified and the products are CE Marked,

Industrial visit is mandatory to bridge the gap between the academic curriculum and the industry. It provides an opportunity for students to understand the theoretical knowledge acquired in the classroom with practical application in industries. This helps the students to develop their skills and competencies for industry needs. To meet this need, the Department of Mechanical Engineering keeps arranging an industrial visits for the students. such an industrial visit was organized to M/s. Rajamane Industries Pvt. Ltd, Dabaspete, Karnataka

Students make into two groups for the safety of the student on the shop floor. Students saw the melting of the metal in an induction furnace and the pouring of molten metal into sand mould They understand the preparation of mould with the help of pattern and core. Students are understanding the Nonferrous casting process and its differences from the ferrous casting process. The students found this industrial visit very useful. This visit improved the student's knowledge of various foundry process practices and equipment presently being used in foundry the industry.

Visited Industry: M/s. Hydax Hydraulics Pvt.Ltd, Attibele, Bengaluru

Students present: 6th Semester (20 members)

Co-Ordinators: Dr. Siddappa P.N. & Dr.Devappa, Asst.Professor,

. **Facilitated by**: Fluid Power Society of India, Bengaluru

HYDAX HYDRAULICS are pioneer manufacturers of hydraulic equipment in India catering to the fluid power needs of premier OEMs in India and a cross section of clients worldwide. Hydax started building machines using a patent pending electrochemical process of deburring with robots of indigenous technology. The concept right from the onset, was to create products that would be indigenously designed, technologically superior and commercially viable. It must be pointed out that we were pioneers in the area of manufacturing hydraulic accessories in India.

Industrial visit is provided an opportunity for students to understand the theoretical knowledge acquired in the classroom with practical application in industries. This helps the students to develop their skills and competencies for industry needs.This industrial visit understand the functioning of industries   The Department of Mechanical Engineering is organized industrial visit to M/s. Hydax Hydraulics Pvt.Ltd, Attibele, Bengaluru on 11.04.2023.

Students First visit gear cutting shop, student saw and understand working of the specila Vertical and horizontal gear cutting machines .These gears are used in gear coupling which will be used in hydraulic system for tranmiting power from motor to gear box or other component. Next visit to electrochemical process of deburring machine building section. Mr Vijukumar explain the different parts of the electrochemical process of deburring machine and how this machining use to remove burr in side the precission components. This machine s used deburing in aerospace, automobile and other precision components. Further we are visited oilfilter manufacturing section.. The students found this industrial visit is Knowledge gain. After complit plant visit Meetali Mukarjee, Manging Director, Explain the students develop skill to cater the current requirment of industry and Engineer should learn preparation of documentations This visit improved the student's knowledge of the electrochemical process of deburring machine Manufacturing hydraulic components and oil filters.

Department organizes two days techno cultural fest **"IGNITE"** on 2nd and 3rd of June, 2023. The objective of the event is to provide the opportunity to students showcase their skills. Students have organized various events such as Bike rally, Stunt show, Superbikes and Supercars Expo Rev bomb event. The inaugural function held on 2nd June, 2023. Mr. Harsha Vardhan C, an entrepreneur, social media influence, you tuber (the throttle) was the guest to inaugurate the function. Principal, Dean Academics, HoD, AO, all department staff are grace the occasion with their presence.

Sports competition was conducted and many times were participated. Bike Rally, Stunt Show, and Superbike and Supercar Expo were three remarkable events that showcased the thrill, skill, and passion associated with the world of motorcycles and high-performance automobiles. These events brought together enthusiasts, professionals, and industry experts, creating a platform for learning, admiration, and camaraderie. The Bike Rally was an exhilarating display of riding prowess, where participants showcased their skills and shared their love for motorcycles. Ms. Roopa DN-Assistant Professor, coordinated the event.

. **Event:** Industrial Visit to **SS Industries,** Kumbalagodu Industrial Area, Bengaluru.

Faculty co-coordinators: Prajwal M & Dr. B N Venkatesh.

Students: IV sem students;

No. of students attended: 30

S.S. Industries was started in the year 2004, by Mr. P. Shivashankar along with Mr. Srikanth & Mr. Sathyanarayana. From a small company with only a few customers, now grown into an organization with over 80 employees. Client list has grown phenomenally and now manufacturing components for various reputed companies across industries.

Excellent infrastructure of spacious manufacturing facility, state-of-art machinery and regularly calibrated measuring instruments that ensure precision quality exactly matching customer's needs.

Expertise in manufacturing has enabled us to become one of the most sought after cold-forged component manufacturers in the India.

The preferred manufacturing partner to a number of reputed OE manufacturers in the Aerospace, Automotive, Tractors, Electrical, and other Industrial applications., as we focus on exceeding our clients' requirements.

Right from the raw material we source from our suppliers to every stage of the manufacturing process, there are extensive checks we make to ensure that only the best quality components are supplied to our customers.

Open day Project Exhibition

COMPUTER SCIENCE & ENGINEERING

1. "Data Center and Cloud Computing"

        The webinar **"Data Center and Cloud Computing"** by MrMahadesha V, Ltd. was held on 1st July 2022 from 3 PM-4 PMin seminar Hall 1.

Mrs. Bhavani B H, Assistant Professor, CSE department welcomed the speaker and all the members present in the seminar. She has introduced the speaker by giving his brief introductionand also briefed about the seminar.She also has empathized on the importance of Cloud Computing as this is a vital concept in this digital era where students can understand and explore more on the Cloud Computing. She also asked the speaker to mentor our students and permit to visit datacenter to our students.

The resource person has more than 21+ yearsof rich experience in supporting IT industry, Government and Start-ups.Presently he is working as Program Director, Center for e-Governance, Govt of Karnataka and also Chief Information Security Officer of the State.

1.   In STPI he played a seminal role in strengthening start-ups, setting up Centres of Excellences in different domains such as Atal Incubation Centre for Healthcare, CoE on IoT, CoE on Industrial Automation, SMART Lab for testing semiconductor chips etc. He was instrumental in setting up STPI Cloud Data Center and Software Product Security Test Center.

2.   As a Nodal Officer for India BPO Promotion Scheme of MeitY under Digital India contributed for generation of new employment in Tier-2/3 towns in Karnataka.

3.   He has managed various IT industry promotion events and Industry consultation meetings on STPI/EHTP policies including new IT policies.

4.   He has supported many e-Governance projects in Karnataka and at present he is heading the Property Registration using Block chain, WiFi for Secretariat, New Age ICT infrastructure for state etc.

Students could get a glimpse of the cloud services, difference between data center and cloud. He also discussed about Clod Computing from business perspective.The feedback given by students were very good. And they suggested to have more webinars on these technical topics in future also. Around 83 students participated in the webinar. In the future also we expect more participants and plan to conduct a hands-on session and the resource person also has agreed for that. We look forward to conduct more such events in the future with the support of our Management, Principal, HoD and department faculty.

        Mr. Sreenatha has expressed his gratitude to the speaker and all the members present in the seminar. And concluded the webinar by giving vote of thanks.

2. Seminar on Insights on System software and Compiler Applications

The Department of Computer Science and Engineering, JSSATEB organized a Seminar on "Insights on System software and Compiler Applications"on 4th July 2022.

Mrs. Snehalatha N, Assistant Professor welcomed the speakers .She briefed about the brief profile of the speakers.She also welcomed Dr Naveen N C, HOD, Department of CSE, all the teaching, non-teaching staff members and 6thsemester students

Dr.Naveen N C, HOD, Department of Computer Science & Engineering welcomed the speakers with bouquet.

Dr Nagaraja G S highlighted on the following topics during his session.

➢ Introduction to System Software
➢ Difference between Application software and System software
➢ Insights into operating system and its functions
➢ Scope for the system software developers

Dr Praveen T briefed about the following topics RISC and CISC architecture

➢ Applications of these architecture
➢ How architecture influences the compilers
➢ Low level virtual machines

Prof Sneha M conducted quiz for the students with Quizziz platform

The session ended with vote of Thanks by Mrs Snehalatha N where she expressed her heartfelt thanks to all the speakers for their informative sessions and all the faculty members and students for being part of this session. Dr Naveen N C thanked all the speakers with memento.

Outcome:
187 students of third year participated in this seminarand were actively involved.Speaker briefed about the importance of system software and compilers in different sectors.
Resource Person(s) with Designation: 1.Dr Nagaraja G S
                                   Associate Dean & Professor

<div align="center">
RVCE, Bengaluru
2. Dr. Praveena T
Assistant Professor,
RVCE, Bengaluru
3. Prof Sneha M
Assistant Professor
RVCE, Bengaluru
</div>

Objective:

- To provide a platform for the students to enhance their technical skills in the field of System software
- To upgrade the technical skills in compiler technology
- To explore the Low level virtual machine platform

3. Webinar career counseling program on higher Education on 30.7.2022

Pooja kishin and the team delivered the talk on higher education in abroad and covered
the following points

1.Application fee oriented and application fee wave-off universities details

2.Job opportunities within the campus to support the studies with rules and regulations

3.How to choose a good course and importance of the undergraduate courses which plays
major role in MS

4.Internship opportunities during course

5.Special reservations for Women candidates in specific universities

6.Wightage of entrance exam scores, Job experience ,paper publications,Projects which help
to avail seats in priority

7.How different universities offer courses on credit based system how candidate should
choose a professor to study the courses

8.Job opportunities

9.Stay and food culture ,Loan availability, Best visa type to avail maximum profit

High quality Photographs of Inauguration, Keynote, session/s and valedictory (with captions)

Resource persons :

1 Pooja Kishin Head,Karnataka Zone with SI UK

2 Keerthi S Software Development Engineer, Bros.Discovery

3 Rohith Pattathil Amazon,Software Development Engineer,

4 Pragna Bhandary Maryland Baltimore County[Phd]

5 Supritha Batt Interning Qualcomm,Newyork University

6 Karthik nesari Cleveland State University

7 Viren The University of Alabama at Birmingham

8 Vyomakesh Clemson University

9 Vignesh P Northeastern University

10 Prajval Nataraj Machine learning data scientist at Mitchell

4. SEMINAR ON THE "AN INTRODUCTION TO DISTRIBUTED SYSTEMS"

SEMINAR REPORT ON THE TALK GIVEN BY SOHAM KAMANI, "AN INTRODUCTION TO DISTRIBUTED SYSTEMS" EVENT SUMMARY: A distributed system is a collection of computing elements each being able to behave independently of each other. A computing element, which we will generally refer to as a node, can be either a hardware device or a software process. A second element is that users (be they people or applications) believe they are dealing with a single system. This means that one way or another the autonomous nodes need to collaborate. How to establish this collaboration lies at the heart of developing distributed systems. Distributed systems are built up on top of existing networking and operating systems software. A distributed system comprises a collection of autonomous computers, linked through a computer network and distribution middleware. To become autonomous there exist a clear master/slave association between two computers in the network. The middleware enables computers to coordinate their activities and to share the resources of the system, so that users perceive the system as a single, integrated computing facility. Although the topic was hard to explain to put together to keep it beginner friendly, the speaker gave clear analogies as to how mankind has always been using Distributed systems and why it will always be in existence. The event also consisted of a bonus hour where the speaker interacted with the students and cleared queries that were not only on the spoken topic but also on real life suggestions and advices, which were appreciated with more questions. Students after hearing the talk were motivated to discover the life of a software engineer who uses distributed computing on a daily basis and think of solutions for complex problems such as CAP theorem, while also exploring the importance the Data Structures and Algorithms technically to reduce the complexity and study the architectures. The event was organised by Sudo Club, Department of Computer Science and Engineering with the help of the club's beloved coo

5. Student Development Program on "Web Technology and its Applications"

Student Development Program on "Web Technology and its Applications" 5/11/22 to 6/11/22

Mr.Vineeth Kumar, Senior developer ,IDFC First Bank delivered the talk and conducted the hands on sessions on MVC with Golang. The Model-View-Controller (MVC) framework is an architectural/design pattern that separates an application into three main logical components Model, View, and Controller. Each architectural component is built to handle specific development aspects of an application. It isolates the business logic and presentation layer from each other. It was traditionally used for desktop graphical user interfaces (GUIs). Nowadays, MVC is one of the most frequently used industry-standard web development frameworks to create scalable and extensible projects. It is also used for designing mobile apps.

The main goal of this design pattern was to solve the problem of users controlling a large and complex data set by splitting a large application into specific sections that all have their own purpose.

Second day of the event Govardhan K C from Software Engineer-1,Amazon delivered the talk on
Frontend Roadmap:

●   HTML: HTML stands for HyperText Markup Language. It is used to design the front end portion of web pages using markup language. It acts as a skeleton for a website since it is used to make the structure of a website.

●   CSS: Cascading Style Sheets fondly referred to as CSS is a simply designed language intended to simplify the process of making web pages presentable. It is used to style our website.

●   JavaScript: JavaScript is a scripting language used to provide a dynamic behavior to our website.

●   Bootstrap: Bootstrap is a free and open-source tool collection for creating responsive websites and web applications. It is the most popular CSS framework for developing responsive, mobile-first websites. Nowadays, the websites are perfect for all browsers (IE, Firefox, and Chrome) and for all sizes of screens (Desktop, Tablets, Phablets, and Phones).

Frontend Frameworks and Libraries:

- AngularJS

- React.js

- VueJS

- jQuery

- Bootstrap

- Material UI

- Tailwind CSS

- jQuery UI

- Some other libraries and frameworks are: Handlebar.js, Backbone.js, Ember.js etc.

Backend Development : Backend is the server side of a website. It is part of the website that users cannot see and interact with. It is the portion of software that does not come in direct contact with the users. It is used to store and arrange data.

- Backend Roadmap:

- PHP: PHP is a server-side scripting language designed specifically for web development.

- Java: Java is one of the most popular and widely used programming languages. It is highly scalable.

- Python: Python is a programming language that lets you work quickly and integrate systems more efficiently.

- Node.js: Node.js is an open source and cross-platform runtime environment for executing JavaScript code outside a browser.

- Back End Frameworks: The list of back end frameworks are: Express, Django, Rails, Laravel, Spring, etc.

And he also educate the students with respect to placement and training since he has been placed with highest package in the year

▪ Interesting topics on dev

▪ Industry used tech stack

▪ Projects for placements

▪ Placement preparation

▪ Coding

▪ Development

▪ Resume

▪ Internships

▪ Hackathons/Open source

▪ Interviews(Tech+HR)

▪ Off-campus & Linkedin

6. SDP on " Application of Big Data in Industry"

The Department of Computer Science and Engineering, JSSATEB organized a Student Development Program on "Applications of Big data in Industry "on 17th December 2022.

Mrs. Snehalatha N, Assistant Professor welcomed the speaker. She briefed about the brief profile of the speakers.She also welcomed Dr Mallikarjuna P B, HOD, Department of CSE, all the teaching, non-teaching staff members and 7thsemester students.

Dr.Mallikarjuna P B, HOD, Department of Computer Science & Engineering welcomed   the speaker.

Dr Mr Vijay Anandan ,highlighted on the following topics during his session.

Introduction to Big Data
Industry view of Big Data
Type of Analytics
Demand of Big data Analytics
Hadoop and its component
Distributed Machine Learning
Distributed Data and Parallelism

The session ended with vote of Thanks by Dr P B Mallikarjuna where he expressed his heartfelt thanks to Mr Anand for his informative session and all the faculty members and students for being part of this session.

Outcome:

93 students of Final year participated in this Student Development Program and were actively involved. Speaker briefed about the importance of Big Data Analytics and its applications in Industry.
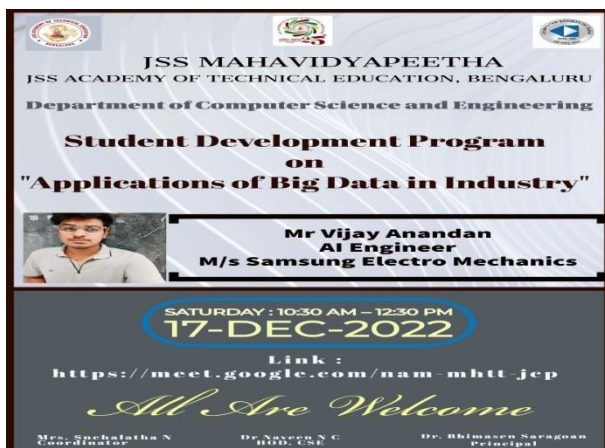
Organized by: Department of Computer Science & Engineering

Resource Person(s) with Designation: **Mr Vijay Anandan**

AI Engineer

M/s Samsung Electro Mechanics

Mode: Online

7. Webinar Report on "Recent Trends in AI ML"

The webinar "**Recent Trends in AI ML** " by MrVenkata Reddy,Senior Developer, SAP Labs, Bengaluruwas held on 21thDecember 2022 from 9AM-10:30 PM on google Meethttps://meet.google.com/iqi-vgth-uvi

Mr. Sreenatha M, Assistant Professor, CSE department has welcomed the speaker and all the members present in the webinar. MrsBhavani B H, Assistant Professor has introduced the speaker by giving his brief introduction. Dr. Naveen, HoD also briefed about the importance of AI & ML in the current industry scenario.

Mr. Venkata Reddy has completed Master of Technology in Computer Science. He started his career with Siemens Information Systems Limited on Healthcare Analytics. Later he moved to Infosys and worked for 6 years in Analytics Domain. In his current role at Accenture, he is involved in building and Architecting Solutions using SAP Cloud Platform, SAP Analytics Cloud, SAP Data Services and SAP BW/4HANA. He is a committed innovator and has received rewards and appreciations like Most Valuable Player for his commitment and dedication many times from his current and past employers, His areas of research include Industrial IoT, QoS in MaNets, Analytica and Machine Learning. The webinar was conducted in online mode using google meet video conferencing tool. He delivered his talk by giving real time examples on machine learning used in medical domain and banking applications. He also briefed about types of Artificial Intelligence and machine learning with relevance of algorithms based on the data set. In a nutshell he has enriched students to gain knowledge on Industry Trends inArtificial Intelligence and Machine Learning concepts Students could get a glimpse of the Artificial Intelligence and Machine Learning techniques and algorithms with real time examples. The feedback given by students were very good. And they suggested to have more webinars on these technical topics in future also. Around 55 students participated in the webinar. A quiz was conducted and evaluated for the students as a part of assignment on this topic. In the future also we expect more participants and plan to conduct a hands-on session and the resource person also has agreed for that. We look forward to conduct more such events in the future with the support of our Management, Principal, HoD and department faculty.

Dr. Naveen N C has expressed the gratitude to the speaker and all the members present in the meeting.
Dr. Pradeep H Khas concluded the webinar by giving vote of thanks.

8. Workshop on The Hands on workshop on "Building a Database Application"

Databases are used for storing, maintaining and accessing any sort of data. They collect information on people, places or things. That information is gathered in one place so that it can be observed and analyzed. Databases can be thought of as an organized collection of information. In a database, it is easy to update data using various Data Manipulation languages (DML) available. One of these languages is SQL. The main purpose of database applications is to provide a way for data to be consumed either by end users (via UI) or other higher-level applications (via APIs). A database application can be used for storing or retrieving data, processing transactions, or various machine learning calculations.

Date: **14/01/2023, 9.00AM-1.00PM**

Target audience: **3 rd year Students**

No. of Participants: **114**

Resource Person(s) with Designation: Mr. Raghavendra S,

  Technical Lead,

  Siemens Technology and Management,

  Bangalore

Mr Raghavendra S developed a simple script using SQL studio and students followed the same.

In real time usage, he has elucidated on the below to develop a database application and illustrated the same by developing a simple real world application.

1)   UI controls creation

2)   Global and local variables

3)   Access specifiers – Public, private, protected, internal

4)   Class object creation

5)   SQL connection

6)   SQL commands

7)   Exception

        Dr. P B Mallikarjuna, HOD, CSE department has expressed the gratitude to the speaker and all the members present in the meeting.

        Mrs. Impana K P, Assistant Professor, CSE department has concluded the workshop by giving vote of thanks.

Objectives:

1.   Requirements of Database

2.   How to build a database application.

3.   Identifying the language for front end

4.   Creating a front end using C Sharp.

5.   Creating a database using SQL.

6.   To learn the establishing a connection between front end and SQL.

9. Introduction to Front End Engineering

Student development program on "Introduction to Front End Engineering" was organized from the Department of Computer Science and Engineering under the banner of CSI Student branch. Dr. Naidila Sadashiv, Associate Professor welcomed the speaker Mr. Satish Agarwal, Software Developer from Microsoft, Dr. Naveen N C, Dean Academics, Dr. P B Mallikarjuna, HOD, staff and students to the Student development program (SDP).

The SDP was organized to the students of second year in order to provide an insight about front end design and exposure to technologies used for development of user inter phase based applications.

The speaker Mr. Satish Agarwal introduced the students to front end engineering, its objectives, scope and few concepts in the User Interface (UI) design. He shared his experience of becoming an UI developer and emphasized on the importance of the subjects that are studied during Engineering and its applicability in UI design.

He also emphasized that next generation of developers should learn from others experience and optimize learning.

Mr. Satish shared very good resources among students for learning front end technologies in detail and also prepare for interviews in top companies.

Finally he thanked all his mentors and expressed that gratitude is a very important aspect of our culture and keeps us rooted in reality.

Outcome: Students learnt about front end design and were made aware of different technologies used for design and development of UI based applications

Date: 24/1/2023

Target audience: Second Year Student

No. of Resource Persons: 01

No. of Participants: 100

Organized by: Department of Computer Science & Engineering

Resource Person(s) with Designation: Mr. Satish Agarwal, Software Developer from Microsoft

Welcome of Mr. Satish Agarwal by Dean and HOD   Session by the speaker during SDP

10. Student Awareness Program on "Social Connect and Responsibility"

On15/2/23 11 -1pm, Mrs.Kiran Kumar,Founder Jeeva,Biotechnology,Solutions Pvt LTd and Mr.Ramsubramanian, Coordinator Team GoPals & Software Professional delivered the talk on importance of organic food and good organic products for the life from cow extracts .

One of the most important aims of the team's work are farmers whose economy is important for our country's growth. How we can take steps towards working with farmers and help them embark on to natural cow based farming through a cooperative setup in villages

Small experiments showed the test the eligibility of water for good health and distributed the sample kit to the students conducting the test . Usage of beverages courses cancer and education of organic products delivered.

On 16/2/23 2-4pm, Dr.Hemalath delivered the talk on Water and Wastewater management. Dr.Hemaltha and team students are taken to the campus tour to understand the existing waste management and water management project plants.

On 17/2/23 11-1pm Mr.Abhilash Nair from SWMRT delivers the talk and involves the students in the waste management Activities.

To achieve the enactment of the circular economy and zero waste principles in public policy , in line with the waste hierarchy principles , which is both sustainable and inclusive.create MODELS and TOOLS, which is at the core of the interventions we do. The SWM problems are first identified, deconstructed & then reconstructed again. Swachhagraha and 2 Bin 1 Bag themes were practiced by the students.

Connecting the urban compost producers from apartments / residential layouts with farmers farming in and around Bangalore. The aim is to send the precious organic waste coming out of urban kitchens back to the soil to close the loop meaningfully: segregation to composting to organic farming/gardening. And providing an opportunity to learn and see the community and home composting units that are installed as live demonstration models. The center also has information panels which promote good practices of waste minimisation, segregation at source that can be adopted at the home and community level

On 17/2/23 2-4:30 pm Gayatri from SWMRT delivers the talk on waste management and project ideas and hackathon events on waste management to take part in the events and exhibit their technical skill to solve the waste management and help the community who works for manual pit clean process

11. Embedded systems, UEFI, BIOS and Industry Trends

With the blessings of His Holiness Mahaswamiji, with constant encouragements from management and college, a technical talk was organized and conducted by the Department of Computer Science and Engineering in order to enhance the knowledge of the students in the field of embedded systems, UEFI and BIOS. At the beginning, Mr. Manjunath B Talawar, Assistant Professor, Dept. of CSE gave a welcome address.The resource person Mr. Santhosh Tiwari, from Intel CCG enlighten the students through his rich experience in the above domain and gave lot of real world examples. Students were benefited from his talk on latest trends in industry on the embedded system platform.The session ended with discussion and vote of thanks by Mr.Vikhyath K.B, Assistant Professor, Dept. of CSE, JSSATE, Bengaluru.

Outcome: Students gained the practical knowledge in the field of embedded systems, UEFI and BIOS systems at par with the current industry needs.

Date:21stFeb 2023 (1 day)
Time: 10:30 AM to 12:30 PM

Target audience:3rd semester CSE students

No. of Resource Persons:01

No. of Participants: 151

Organized by: Department of Computer Science & Engineering

Resource Person(s) with Designation:

Mr. Santhosh Tiwari,

BIOS Security Enabling Lead and Firmware Engineer,
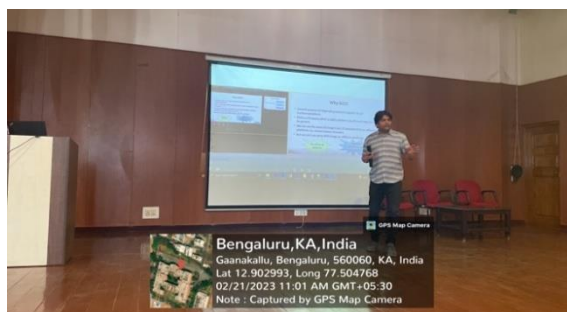
Intel CCG Group, India.

Mode: Offline

   Objective: To enhance the knowledge in the field of embedded system and BIOS.

Dr. P B Mallikarjuna, HOD, CSE welcomed the resource person Mr. Santhosh Tiwari.

Resource person delivering a talk.

Students' participation at the technical seminar

Faculty members association with the program

12. SDP Codeathon: Applications of Data Structures

The Department of Computer Science and Engineering, JSSATEB , in association with M/s iamNeo organized a Student Development Program Codeathon: a Coding Contest in Applications of Data Structures "on 2nd March 2023.

Mrs. Snehalatha N, Assistant Professor briefed about the contest and welcomed all the 3rd semester students.Dr Prabhudev Jagadeesh highlighted on the importance of coding and how it would help to build the programming skills and helps in placements.

Total 44 teams (3 Members per team) participated in the Coding contest. Each team were given separate login and were able to access the platform provided by iamNeo. Each teams were given set of 5 real time applications problems. Students were given total time of 5 hrs . Every problem were given with 5 test cases. Evaluation was done based on their team performance and the efficiency of the code.

Outcome:. Around 130 students of 3rd semester participated in the event, where the students designed and implemented solutions to real world problems related to data structures applications. The event helped students to assess their problem solving, analytical, programming and teamwork skills.

Prizes and Certificates were issued to the winners. Company Iamneo has given as prize, access to Java

Objective:

- To provide a platform for the students to enhance their programming and technical skills in Data Structures
- To explore new coding platform and participate in the coding contest.
- Explore to the real world problems and its solutions in Data Structures.
- To improve the analytical and problem solving skills.
- To exhibit the team work.

13. Student Development Program:Collaborative Practice Projects-2023

Title: Student Development Program: Collaborative Practice Projects-2023

Category: ADE Project Presentation

Date: 09th March 2023 (1 day)

Time: 10:00 AM to 12:30 PM

Target audience: 3rd semester CSE students, 1st year students, Staff members

No. of Resource Persons: 3rd semester CSE students

No. of Participants: 138

Organized by: Department of Computer Science & Engineering

Subject Teachers(s) with Designation:

<div align="center">

Mrs. Pooja H ,Assistant Professor

Mr.Niranjan C Kundur, Assistant Professor

</div>

Venue: Analog and Digital Electronics (ADE) Lab, Academic Block A,

Objective: To enhance the knowledge in the field of Analog and Digital Electronics.

With the blessings of His Holiness Mahaswamiji, with constant encouragements from management and college, Student Development Program:Collaborative Practice Projects-2023a mini project demonstrationwas organized and

conducted by the Department of Computer Science and Engineering in order to enhance thepractical knowledge of the students in the field of Analog and Digital Electronics (ADE) by implementing ADE Models.Project exhibition started at 10 AM in Analog & Digital Electronics Lab and Networks Laboratory. All 3rd Semester students participated in the project exhibition and demonstrated their projects to Principal, H o D of CSE, Dean Academics , all the department staff and faculty from other departments. Objective of the project was to find solution to some of the societal problems. The project addressed solutions to real time problems as electronic devices play a vital role in addressing them. Project exhibition was also witnessed by 1st year students where they could get ideas to carry out these kind of projects related to Electronic Circuits. Principal, Dean Academics, H o D and all other staff members appreciated the efforts made by student groups in carrying out these projects. They also gave inputs to enhance the projects and to come out with product so that it can be used in our Institution. Students were motivated with the appreciation received from everyone and they assured to enhance their projects so that it becomes helpful to the society. Event was coordinated by Mrs Pooja H and Mr. Niranjan C Kundur with continuous support from H o D, CSE.

Outcome: Students gained the practical knowledge in the field of Analog and Digital systems by implementing and conducting the realtime models.
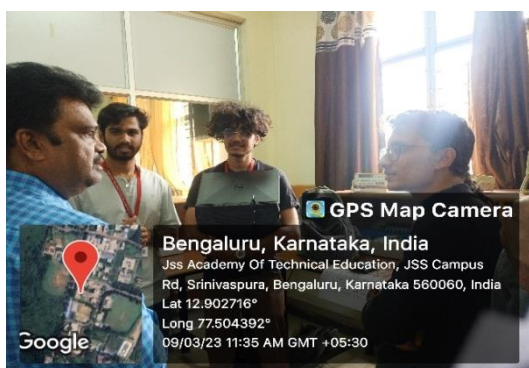
14. Student Development Program on "Design Thinking for Strategic Innovations"

The Student Development Program (SDP) on "Design Thinking for Strategic Innovations"byDr. Dinesh R,Principal Engineer, Samsung Pvt. Ltd, Bengaluruwas held on **11th March, 2023** from **11:00AM to 01:00 PM**in Seminar Hall-2.

Mr. Sreenatha M, Assistant Professor, CSE department welcomed the speaker and all the members participated in SDP. Dr. Mallikarjuna P B, Associate Professor& HOD, introduced the speaker by giving a brief introduction and also briefed about the importance of Design Thinking and Innovationsin the current industry scenario.

Dr. Dinesh R is a Principal Engineer at Samsung, Bangalore. Prior to joiningSamsung, He worked for companies like Amazon, Honeywell, HCLTechnologies. He was a post-doctoral fellow at Seoul National University,Seoul. His areas of research interest include Image processing, PatternRecognition, Computer Vision and Machine Learning. He has over 60publications to his credit at both International and National Journalsand conferences. He also has 27

awarded patents to his credit. He isserving in the editorial board of several journals. He has beenidentified as reviewer for several International Journals/conferences.He has served as a program committee member for severalNational/International Conferences. He has successfully guided 3 Ph.Dscholars and presently guiding 6 Ph.D scholars. He has successfullyguided many academic and research projects. He is a life member of IEEE,Computer Society of India and Society of Statistics, Compute andApplications, International Association of Engineers, Hong Kong. He isalso serving as a member of Board of Studies, Board of Examiners andAdvisory committees in several universities.

He delivered his talk by giving real-time examples ofProduct Design used in the real-timeindustrialapplications. He also briefed about phases in design of the product with relevance to the production time and cost. In a nutshell he has enriched students to gain knowledge on design thinking for strategic innovation with real time examples. The feedback given by students were very good. And they suggested to have more SDPs on these design aspects in future also. Around 170 students participated in the SDP. A quiz was conducted and evaluated for the students as a part of assignment on this topic. In the future also we expect more participants and plan to conduct a hands-on session and the resource person also has agreed for that. We look forward to conduct more such events in the future with the support of our Management, Principal, HoD and department faculty.

Dr. Mallikarjuna P B has expressed the gratitude to the speaker and all the members present in the meeting.
Mr. Sreenatha Mhas concluded the SDP by giving vote of thanks

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15. Research Methodology and Publication Ethics

Date : 2nd june 2023
Title :Research Methodology and Publication Ethics
Resource Person: Dr.Milli Pant,Professor &Head of the department
                    Applied Mathematics & Scientific Computing
                    Indian Institute of Technology ,Roorkee
Target Audience : Faculty Members and Research Scholars of JSSATE,Bengaluru

Session started at 9:30 Am ,with WelCome speech by Dr Prdeep,Followed by speaker introduction by Dr Mallikarjuna P B,HOD-CSE.

Speech by key person : following are the contents covered in session

•Resource Motivation

•Research Problem Selection and formulation

•Key ingredients of research

•Choosing right problem and formulation of right questions

•Paper Publications

•Classification of papers

•Paper writing skills

•Research skills

•Research ethics

•Plagarisum

•Research presentaion

•Presentation skills

overall the session gave brif information about all the abovementioned topics Sesession was ended by 11:30 AM,with vote of thanks conculded by Prof.Bhavani .

16. Cloud Computing: Event Driven Architecture”

A technical Talk on "**Cloud Computing: Event Driven Architecture**" by Mr Akshay P Jain, Data Science Engineer, Seclogic Technologies Pvt. Ltd, Bengaluru was held on 24ᵗʰ June 2023 from 10:30AM-11:30 AM in room no. A313
 Mrs. Bhavani B H, Assistant Professor, CSE department introduced and welcomed the speaker and all the members present for the technical talk.

Mr. Akshay Jain has completed his Bachelor of Engineering in Computer Science at JSS Academy of Technical Education in the year 2020. He started his career as Software Developer Intern in Botman, Ninja now called ClearTrust during Jan 2020 and Feb 2020. He worked as Sofware Engineering Intern for JP Morgan & Co during May 2020. Currently he is working as Data Scientist-II and he is leading the development of end user application for workload protection for S3 and serverless functions (AWS Lamda, GCP Function) based on application and vulnerability scan logs. He has designed event-driven data pipeline using AWS eventBridge with zero data loss, which could scale up to 100,000 requests per second to ingest clients' AWS logs.

This talk was organized exclusively for students who opted Cloud Computing as Professional Elective. Theoretical concepts was augmented with demonstration of creation of Amazon EC2 instances, how to create Amazon Web Services (AWS) account for using all the 3 services like Infrastructure as a Service(IaaS), Platform as a Service (PaaS), Software as a Service(SaaS). He also demonstrated on how to get free tier, how billing is made when free tier is exceeded. Students could get a glimpse of the Data Driven Architecture and Event Driven Architecture, create AWS instances, AWS Elastic MapReduce, and some vulnerability issues in AWS.

The feedback given by students was very good and they suggested to have more technical talk on these technical topics in future also. Around 55 students participated in the technical talk. A quiz was conducted and evaluated for the students as a part of assignment on this topic.

Dr. Naidila Sadashiv has thanked the speaker and all the members present for the technical talk.
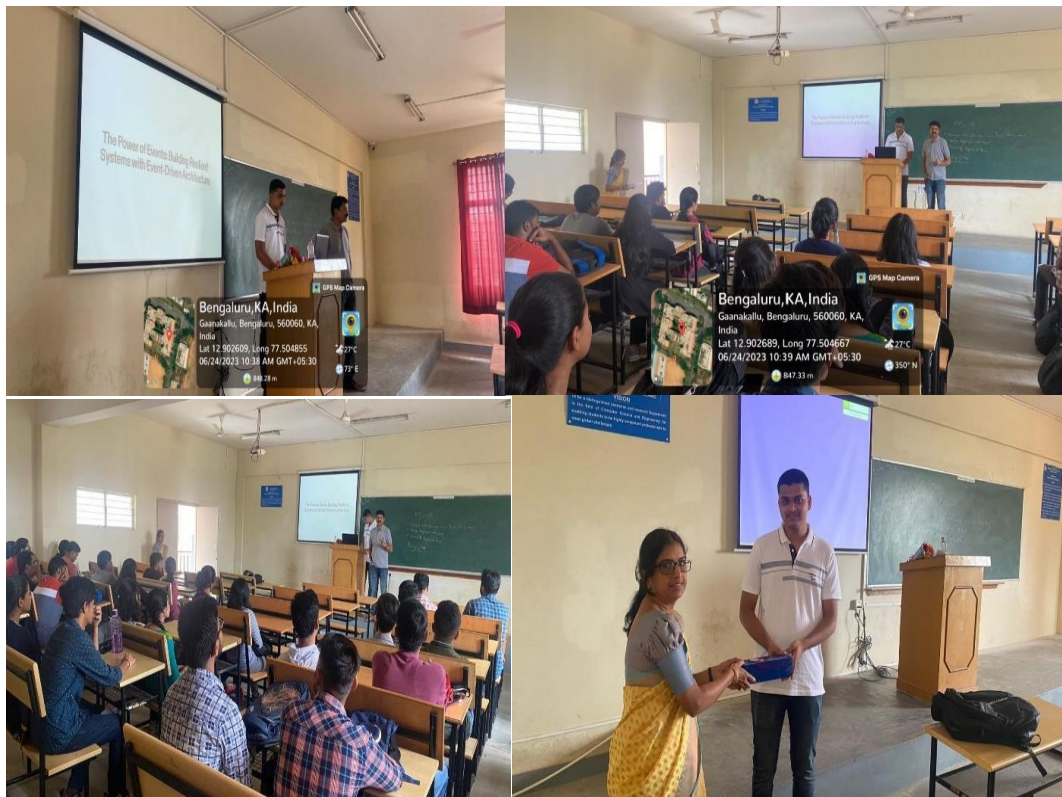
17. A talk on "Python as a Career " under the banner of CSI student branch

A talk on "Python as a Career" was organized on 19/8/2023 from the Department of Computer Science and Engineering under the banner of CSI Student branch. Dr. Naidila Sadashiv, Associate Professor welcomed the speaker Sanjay N T, Machine Learning Engineer @Samsung Electro Mechanics, Dr. Jagadeesh Prabhu, Professor, Dept. of CSE and students to the session.

The talk was organized to the students of second semester who are studying Python inorder to provide awareness about Python opportunities and its scope from Industry perspective.

The speaker and also an Alumni of our Department, Mr. Sanjay N T, started with a glimpse of Python popularity and its features. He spoke about the ample of opportunities as a developer, DevOps Engineer, AI Engineer to name a few. The speaker also advised about how to prepare for these options and motivated students to code. He also shared his experience as student, intern and his current role in company.

Outcome: Students were motivated to apply Python skills for service development and get connected with developer's community.

Level: National

Title: **Python as a Career**

Category: CSI Event Date: 19/8/2023

Target audience: Second Semester Students

No. of Resource Persons: 01, No. of Participants: 60

Organized by: Department of Computer Science & Engineering

Mode: Offline

Objective: Awareness about Python opportunities and scope

Resource Person(s) with Designation: **Sanjay N T, Machine Learning Engineer @Samsung Electro Mechanics**

Welcome of Mr. Sanjay N T by Dr. Jagadeesh Prabhu, Professor, Dept. of CSE

Interaction during the talk

Session by the Mr. Sanjay N T

Vote of Thanks

ATAL FDP on "Artificial Intelligence and Machine Learning Techniques for precision Agriculture" (AICTE Training and Learning Academy)

A two-week Faculty Development Program **titled "Artificial Intelligence and Machine Learning Techniques for Precision Agriculture"** was held from 10/10/2022 to 21/10/2022. This FDP was sponsored by AICTE Training And Learning (ATAL) Academy which is committed for development of quality technical education in the country by initiating various schemes launched by Ministry of Human Resource Development, Govt. of India. Under the ATAL Academy FDP scheme our Institution received a grant of Rs.3 lakhs from AICTE for the conduction of this event.

Brief Overview about the FDP

Agriculture plays an important role in economy of any nation. A stable agricultural system ensures a country for food security, source of income and source of employment. The growing need for food worldwide requires the development of a high-performance, high-productivity, and sustainable agriculture, which implies the introduction of new technologies into agricultural practices.

In this direction Precision agriculture provides a decision support system for whole farm management with the goal of optimizing returns on inputs while preserving resources.

Artificial Intelligence and Machine Learning techniques have proven its potential to build intelligent and sensible systems for agricultural applications.

At the national and international scenario there is a significant adoption of precision agriculture which includes AI, ML, Deep learning and IoT based solutions. This has taken the farming to the next level.

The focus of this FDP was to sensitize participants with precision agriculture technology, the present status, benefits, and limitations of the state-of-the-art technologies used in Precision Agriculture.
The FDP had a blend of Experts from the domains of Agriculture and AI and ML technologies as Resource persons since this FDP theme requires the knowledge from both domains.

Resource persons were from Centre of Studies in Resources Engineering, IIT Bombay, scientist from Terrestrial Ecosystem Research Network, University of Queensland, Scientist from Land and Water Management engineering, Indian council of agricultural research, Scientist from University of Agricultural Sciences, Bengaluru, Indian Institute of Science and Expert from industry ie., Samsung.

This FDP as per ATAL Academy guidelines was held in Hybrid mode. First week sessions were on theoretical concepts which was conducted online and second week was practice and experiential learning in offline mode. Also, in this FDP 2 relevant state-of-the-art research articles will be deliberated. A visit to University of Agricultural science, GKVK was held to understand the state of art agricultural practices and avenues for research.

Participants

Forty-Eight Faculty members/Research Scholars from 22 Engineering colleges across the State participated in the FDP. Forty two Participants successfully completed the FDP after Assessment.

Assessment

Assessments were conducted as per the ATAL guidelines as detailed below. Participants with minimum of 80% attendance and assessment score of 70% and above were considered to have successfully completed the FDP.

Parameter	Weightage
Attendance	10%(Individual)
Two assessments	20% (Individual)
2 Page Article Summary/per Team	30% (Team & Individual)
Teaching Practice	15% (Individual)
Report/outcome of Industrial visit	10% (Team)
Reflection Journal	15% (Individual)

Name and Organization of the Resource person

1.Dr. Adinarayana, Professor, Centre of Studies in Resources Engineering, IIT Bombay

2.Dr. Shivarama Varambally, Professor of Psychiatry & Head (I/c), Dept of Integrative Medicine, NIMHANS, Bengaluru

3.Dr. Omkar S N, Chief Research Scientist Department of Aerospace Engineering, IISc

4. Dr. Manjunath S, Chief Engineer at Samsung Electro Mechanics, Bengaluru.

5. Dr. Siddeshwara Guru, Director, Data Science at Terrestrial Ecosystem Research Network, University of Queensland, Australia

6. Dr. Jitendra Kumar, Scientist (Land and Water Management Engineering), ICAR-VPKAS, Uttarakhand

7. Dr. D.S Guru, Professor & Chairman, Dept. of Studies in Computer Science, University of Mysore

8. Dr. Sreenivasa Setty, Chief Technical officer, SST Technologies, Bengaluru

9. Dr. Latha Y L , Research Associate, Plant Factory

10. Dr. Havyas K S , CEO and Co Founder, Beegle Agritech

11. Mr. Pradeep H K, Asst. Prof, CSE, JSSATE

12. Dr. B.S Mahanand, Professor, Information Science & Engineering, JSSSTU, Mysuru

13. Dr. Rajath Vasudevamurthy, BMS College of Engineering, Bengaluru

Seminar on "New National Education Policy-2022:

Impacts on Future Indian Education System" at JSS Academy of Technical Education, Bengaluru on 2 nd Sep 2022. The programme was sponsored by Karnataka State Higher Education Council (KSHEC), GoK The training program was started with blessings of His Holiness Jagadguru Dr. Sri Shivarathri Rajendra Mahaswamiji and His Holiness Jagadguru Sri Shivarathri Deshikendra Mahaswamiji. The blessing of the almighty was invoked by Ms. Chaithra and team. Dr. P M Shivakumara Swamy welcomed the guests and the participants. The program was symbolically inaugurated by lightening the lamp by all dignitaries. Dr. Mallikarjunaswamy S gave a brief introduction about the training programme and its objectives. Mrs Gunasagari G S, introduced the chief guest Dr. Venugopal K R. explained about NEP 2022 and impact on future education system, educational system problem and progress towards better education system. Dr. Anuradha M.G, Introduced the chief guest Dr. T N Thandava Gowda explained about NEP 2022, How it helpful to the institutions and university . what all the activities have been included in the NEP process Dr. Thejaswini P, Introduced the chief guest Dr Satishkumar S. Hosamani . explained about library science and information centre has been helpful for NEP process and what all the facilities are available public libraries and libraries app The Principal Dr. Bhimasen Soragaon addressed the gathering about the importance of the Seminar. The programme was concluded with vote of thanks by Mrs Pavithra G S. Dr. Anuradha M.G was the master of the ceremony.

Training programs and guest lectures arranged by dept. Internships and Industrial visit with photograph (Duration, Topic, Names of Guest Lecturer etc) with expenditure details

Training programs and guest lectures

Sl. No	Topic	Topic Date	Name and Organization of the Resource person	No.of persons attended	Details of Expenditure & funds (in Rs) (Registration fee & TA/DA)
1	Internship on " Web and Mobile application Development"	11.10.2022 to 31.10.2022	In-house	97 (42+55)	Rs.4917.00

Title: **Internship on Mobile Application Development** Date: **11 Oct to 31 Oct 2022**

Target audience: **3rd Sem Students** No. of Resource Persons: **6** No. of Participants: **41**

Resource Person(s) with Designation:

1. Dr. Naveen N C, Professor & Head, CSE

2. Mrs. Rajeshwari K S, Asst. Prof, CSE

3. Mrs. Swetha Kaddi , Asst. Prof. , CSE

4. Mrs. Bhavani B H, Asst. Prof. , CSE

5. Mr. Sreenatha M, Asst. Prof. , CSE

Mode: **Offline**

Objective:

- To learn new technology of current paradigm.
- To develop applications in the latest operating system with practical implementation and begin managing your own mobile applications like a professional.

Brief Report

Department of Computer Science had organized the Internship on "Mobile Application Development", dated 11th - 31st October 2022. Totally 41 participants attended the Internship.

The objectives of the Internship were to learn and acquire the art of Android Programming, Configure Android studio to run the applications, Understand and implement Android's User interface functions.

About the Internship:

Mobile application development is the process of creating software applications that run on a mobile device, and a typical mobile application utilizes a network connection to work with remote computing resources. Hence, the mobile development process involves creating installable software bundles (code, binaries, assets, etc.), implementing backend services such as data access with an API, and testing the application on target devices. To develop applications in the latest operating system with practical implementation and begin managing your own mobile applications like a professional. Attendees will be provided with instructions to build and manage their new mobile applications.

Program Schedule:

Inauguration: 11/10/2022 10.00 AM

Internship on "Mobile Application Development", dated 11th October 2022 was inaugurated by the HOD, Dr. Naveen N C.

Mrs. Rajeshwari K S, Assistant professor, welcomed all the members present in the Internship and spoke about the details of Internship like objectives, about Internship, Program Schedule and resource persons of the Internship.

Dr. Naveen N C, Head of the Department had spoken about the necessity of the Internship and asked the students to learn the new technology and implement it in different areas.

The Inauguration was ended by Mrs. Shweta Kaddi, Assistant professor by expressing her gratitude to all the members present in the program.
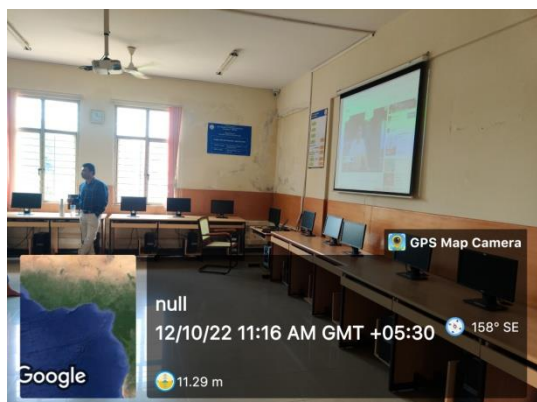
Industry Visit to ISRO

The industrial visit to U R Rao Satellite Center (URSC)ISRO, Bengaluru was organized for 3rd semester students and faculty members on 7/2/2023.

Gap in the curriculum: Awareness on emerging technologies and Research

Objectives of Visit:

- To encourage & motivate students for building their career in scientific and research activities related to space applications and research.
- To gain knowledge about the ISRO organization and learn about ongoing projects.
- Faculty members viz., Mrs. Snehalatha N, Dr. Prabhudev Jagadeesh and Mrs. K.S.Rajeshwari coordinated this visit.
- 40 Students of 3rd Semester CSE participated in the visit.

U R Rao Satellite Centre (URSC), Bengaluru, formerly known as ISRO Satellite Centre (ISAC) is the lead centre for building satellites and developing associated satellite technologies. These spacecraft are used for providing applications to various users in the area of Communication, Navigation, Meteorology, Remote Sensing, Space Science and interplanetary explorations. The Centre is also pursuing advanced technologies for future missions. URSC is housed with the state-of-the-art facilities for building satellites on end-to-end basis. ISRO Satellite Integration and Test Establishment (ISITE) is equipped with state-of-the-art clean room facilities for spacecraft integration and test facilities including a 6.5 Metrethermo vacuum chamber, 29 Ton vibration facility, Compact Antenna Test Facility and acoustic test facility under one roof. Assembly, Integration and Testing of all Communication and Navigation Spacecraft is carried out at ISITE. A dedicated facility for the production of standardized subsystems is established at ISITE.

URSC has a unit called Laboratory for Electro Optics System (LEOS), which is situated in Peenya, Bengaluru and is mainly responsible for research, development and productionisation of Sensors for ISRO programmes.

Since inception, URSC has the distinction of building more than 100 satellites for various applications like scientific, communication, Navigation and remote sensing. Many private and public sector industries are also supporting ISAC in realizing standard satellite hardware.

The visit started at 9:50 am from the college campus. Totally 40 students and 3 faculty members, Dr. Prabhudev Jagadeesh, Mrs. Snehalatha N, and Mrs. K S Rajeshwari took part in the visit. The team reached the campus around 11:00 am. Mr. Santhosh of ISRO did the welcome and gave a presentation of the overview of ISRO initiatives with regard to space exploration.

In presentation video, they displayed how to build a satellite, and the need for Engineers from all Engineering disciplines. Launching process of satellites which is done in Sri Harikota was also presented.

After the presentation, a demo of the working of a real communication satellite was made. He also explained in detail about The essential services of Communication Satellitesto the nation namely, Telecommunication, Television and Radio broadcasting, Meteorological imaging and weather forecasting, weather data collection and data dissemination, Disaster warning etc., was explained. For providing these services the space system has two segments viz. the space segment and the user ground segment. The space segment consists of the spacecraft at

different orbital slots.

Then the team visited the exhibition in which they displayed about the information of various satellites launched by ISRO, materials used to build the satellite, different shape models used by satellite construction.

Industry Visit to M/s Honeywell

Gap in the curriculum: Awareness on emerging technologies and Research

An industry visit to M/s. Honeywell was organized on 10/03/2023. Mr. Venkatesh Yelsangikar, Senior Director Engineering and Mrs. Meena Prasad, University relations Head were instrumental in arranging the visit. During the visit the HR managerMs. Varsha, gave a presentation about Honeywell's areas of business and career growth at Honeywell which motivated students to aspire to be part of Honeywell in future.Mr. Bhaskar Nagarajan, Vice President, Engineering provided his inspiring thoughts and suggestions to students which motivated them to develop bigger aspirations. He gave an overview of Honeywell's products in domains like Aerospace, Building Technologies, Performance materials & Technologies, safety, and productivity solutions. He also informed the necessity of re-skilling and upskilling to stay relevant in Industry.

The visit to Flight Management System(FMS) Laboratory and Industrial Automation Laboratory provided us with insights into the real working environment of aviation.Mr George, Mr. Manikanta and Mr Amol gave an effective demonstration of their works in these laboratories. They informed that Honeywell's FMS family has already been deployed by Airbus. The new FMS is being developed to build upon millions of hours of Honeywell's FMS legacy, with enhanced modularity, advanced functionality, and a multi-core processing platform.

Mr. Pradeep Sadananda, Director, Technology and Strategy was incharge of this visit and leadthis event and made it a learning and enjoyable experience. Mr. Sudharshan, Embedded Engineering Manager meticulously planned and coordinated the entire visit.

Faculty members interacted with the Honeywell team about the possibilities of further interaction through Internships, Hackathons and Faculty/Student development programs.

The knowledge and experience shared by the Experts who interacted, enlightened the visiting team about the emerging technologies and the contributions of Honeywell to various sectors.

Industry Visit to M/s LTI Mindtree

Date : 18.5.2023

Resource person and organization : Mr. Karthik Bhaskar , M/s LTI Mind Tree

No. of participants : 67

We express our heartfelt thanks to the Management, Principal, Head of the Department, Computer Science, and for giving us an opportunity to visit **LTIMindtree**

LTIMindtree is a new kind of technology consulting company. We help businesses transform – from core to experience – to thrive in the marketplace of the future. With a unique blend of the engineering DNA with the experience DNA, LTIMindtree helps businesses get to the future, faster.

[LTIMindtree](#) is a global technology consulting and digital solutions company that enables enterprises across industries to reimagine business models, accelerate innovation, and maximize growth by harnessing digital technologies. As a digital transformation partner to more than 700 clients, LTIMindtree brings extensive domain and technology expertise to help drive superior competitive differentiation, customer experiences, and business outcomes in a converging world. Powered by 82,000+ talented and entrepreneurial professionals across more than 30 countries, LTIMindtree — a Larsen & Toubro Group company — combines the industry-acclaimed strengths of erstwhile Larsen and Toubro Infotech and Mindtree in solving the most complex business challenges and delivering transformation at scale

Overall the visit was very useful to the students as they could visualize the supercomputer. Around 67 students from 6th Semester visited LTIMindtree accompanied by 3 staff members Dr.Sharana Basavana Gowda,

Open Day 2023 – Project Exhibition
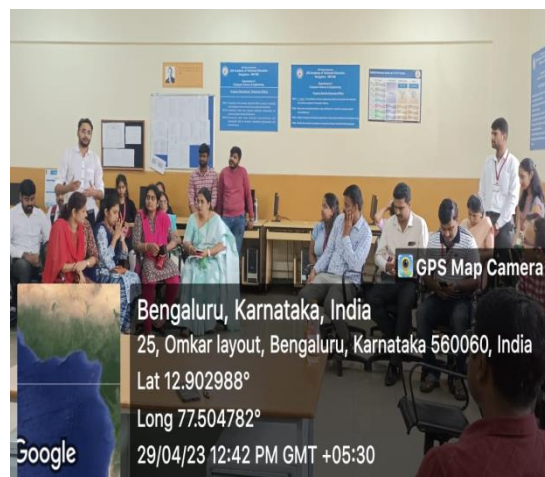
MASTER OF BUSINESS ADMINISTRATION (MBA)

Title: Motivational Talk on "Aligning Minds"

Brief report:

The Department of Management Studies in association with IQAC had organized Motivational talk on 11.02.2023.The resource person for the session was   Mr. Vinod Kumar, Supply Chain Operations, Accenture, Vice President Alumni Association, JSSATEB.The target audience for the session were MBA-III semester students. The objective of the session was to motivate the students towards aligning minds.

Mr.B.Vinod Kumar was greeted by Professor and Head, Dr.T.S Nanjundeswaraswamy.

The program began with welcome by Ms.Suma, MBA-III semstudent. The resource person for the session highlighted on various aspects resulting to the overall development of students. He highlighted on Current market trends, importance of communication skills. He emphasized on aligning minds to corporate requirements. He also advised students on the importance of campus drive hiring.There was interaction session with the students.

The session concluded with a vote of thanks and a memento was presented to Mr.B.Vinod Kumar as a token of gratitude.

INVITATION:

PHOTOS WITH CAPTIONS:

Prof.Sowmya C.U, Assistant Professor,DMS welcomes Mr.B.Vinodkumar,Supply chain &Operations, Accenture ,Vice president, Alumni Association-JSSATEB

Dr.Pradeep M.P, Associate professor, DMS,JSSATEB presenting a memento to Mr.B.Vinodkumar,Supply chain & Operations, Accenture ,Vice president, Alumni Association-JSSATEB

ADRISHT 2K23 aimed to provide students with a platform to apply their theoretical knowledge to practical scenarios, fostering teamwork, decision-making, and problem-solving skills. The event was designed to simulate real-world management challenges and opportunities.

Program started with great enthusiasm and energy during the inauguration program held on 17ᵗʰ August 2023. The program was a grand opening to the fest. Invited Mr. Ganesh Babu K, managing director, India and global head of project, Boomitra as a chief guest, Dr H R Mahadevswamy, joint director (TED) JSS Mahavidyapeetha, Mysuru as guest of honor and program was presided by Dr.BhimasenSoragaon, Principal JSSATE-Bengaluru, Dr. T S Nanjundeswaraswamy Head of the Department, Department of Management studies JSSATE-Bengaluru and Dr Pradeep M P Coordinator Department of Management studies JSSATE-Bengaluru.

Fest was filled with series of activities

Samara-Sports competition

Prabandhanam- Management event

Tarangini- Cultural event

Sports Events:

Samara was organised on 16ᵗʰ and 17ᵗʰ August 2023.

Sports was a highlight of the fest, attracting participants who were passionate about sports. Teams were tasked with creating strategies for organizing a hypothetical sports tournament. Sports event was followed by

Cricket, Volley ball, Throwball, Carrom and Tug of war.

This event provided participants with insights into the complexities of managing sports events and honed their organizational skills.

Sports attracted 55 colleges, 75 teams and 390 participants.

We invited referees for particular events:

Judge Name	Event
Ramu	Volley ball
Vijay	Volley ball
Jerome	Throw ball

Winners and runners of respective sports events are as follows:

Event	Winners	Runners
THROWBALL	Hema R	Dorothy V B
TUG OF WAR(G)	Pavithra N	Nandhitha M
TUG OF WAR(B)	Prashasth NS	TarunBasavaraj
CARROM SINGLES	Prince Joel	Bose S
CARROM DOUBLES	Darshan M	A Franklin
CRICKET	GirishGowda	B Shivkumar
VOLLEYBALL	ShaanDoron	Mohith v

Few of the moments of Sports events is followed:

Management Events:

Prabandanam was organised on 17th August and final rounds were organised on 18th August.

Management events play a crucial role in a college management fest. It involved planning, organizing, coordinating, and executing various aspects of the event. This includes setting event objectives, creating schedules, coordinating with teams and managing resources.

Series of events of Prabandhanam are

Finance, Human Resource management, Marketing, Business Plan, Business Quiz, Best Manager and Team building.

Participants had a platform to apply theoretical knowledge to practical situations and also to exposure for real-world

scenarios and interactions with industry professionals often helps participants refine their analytical abilities, adaptability and innovative thinking.

Statistics shows management event had 152 participants of 51 colleges as 59 different teams.

Our proud judges for conducted management events are:

Judge Name	Event Name
Dr.Dilip	Finance
Dr Nijaguna G	Marketing
Dr Shekar H S	HR
Mr Sridhar H R	Business Quiz
Dr. Jacob Swaminathan	Best Manager
Dr. Harish H	Best Manager
Dr.YuvrajNath	Best Manager

Winners and runners of respective management events are as follows:

Event	Winners Name	Runners Name
Marketing	AapthaShetty	A J Rachana
Hr	Kokila	Pragya Sharma
Finance	SiddharthBhora	Vaishnavi T
Best Manager	Nabeel Ahmed	-
Business Plan	SanjanaChindak	-
Business Quiz	Ashwin A K	Krithik V
Team Building	Shashikumar N	Dhanush C

Cultural Events:

Tarangini events were schedule on 17th and 18th August 2023

The cultural segment of the fest celebrated the diversity of talents among students. It featured a variety of performances, including

Solo dance, group dance, fashion show, face painting and stand-up comedy.

Participants had the chance to express their creativity and cultural backgrounds through their performances, fostering a sense of unity and appreciation for different cultures.

Cultural event highlights total 20 colleges as 15 teams and 24 participants.

Events were judged based on creative and talent. Our Judges were:

Judge Name	Event
Jackson vadi	Solo Dance
Harsh Gupta	Group Dance and fashion show

Winners and runners of respective events are as follows:

Event	Winners	Runners
Face Painting	Spoorthy K Y	-
Stand-Up Comedy	Aryan Surya	-
Fashion Show	NareshAb and team	AnimeshBharadwaj and team
Group Dance	AnimeshBharadwaj and team	Harsha Kumar M and team
Solo Dance	Harsha Kumar M	Rakshith R

Altogether report highlights the impressive statistics of ADRISHT2k23, featuring total number of 155 teams, 580 participants, from 43 colleges, out of which 4 colleges are from Mysore and rest were from Bangalore. All colleges are Degree college, Engineering college, B-school, Private Universities and PG centre colleges who enthusiastically participated and contributed to its success.

Report on Workshop – Capacity Building for Principals of JSS Technical Institutions held on 30th June and 1st July 2023

This Program was inaugurated on Friday (30th June, 2023) at 10am by a team of dignitaries namely Chief Guest K. R. Santhanam, Director, Accounts & Audits, JSSMVP, Mysuru, Key note speaker – Dr.BasavanaGowdappa, Principal, JSS Academy of Higher Education and Research,Dr.Nanjundeswaraswamy, Head of the Department of Management Studies, Dr.BhimasenSoragaon – Principal, JSSATEB and Dr. H.R Mahadevaswamy, Joint Director, Technical Education Division, JSS Mahavidyapeetha, Mysuru. The objective of the programme was to strengthen the competence of the leaders of JSS technical institutions, while bridging the gap if any, in the skills and abilities to survive, adapt and thrive in the fast changing world.

The programme aimed to reinforce the emotional, intellectual and physical capacities of the leaders to take on the world on their side.

The Key note speech delivered by Dr.Basavanagowdappa, Principal, JSS Academy of Higher Education and Research, was a real thought provoking session. It set the right stage for the rest of the workshop's sessions of keeping the audience intact and engrossed.

Session 1 was delivered by Sri K.R. Santhanam, Director, Accounts& Audits sharing his secrets of success in workplace advising on the leadership skills required by people to excel in their areas of interest.

Session 2 was delivered by PadmashriDr.Prahlada Rama Rao, who engulfed all the participants with his sheer speech without even slides or write up. His life time experience of working with India's Missile Man Dr. APJ Abdul Kalam, the former President of India on exemplary missions including Brahmos, Akash, Pruthvi Missiles and Submarines gave unforgettable memories. His words of wisdom on creating the future India by promoting

Entrepreneurship and a hint on setting up JSS Industrial Estate are highly commendable.

Day 1 post lunch session delivered by Dr.Satishchandra, Career Strategist also enlightened our energetic leaders on the strategies required to groom the fellow officers to achieve higher results. His valuable suggestions on Reassurance, Reinforcement and Revelation would be adopted through our life time.

Day 2 started with a campus Tour of JSS Academy of Technical Education, Bengaluru followed by a session delivered by Sri RamaniVenkat, Senior Strategic Advisor, Bangalore. He stressed upon the importance of leadership skills to prosper in the professional life.   This was followed by presentation by the participant Principals of JSS Technical Institutions about their institutional challenges and strategies. All the participants were given appreciation certificates in the valedictory function and the workshop was concluded with Vote of Thanks. The programme was coordinated by the faculty of MBA department and organized by the Principal, JSS Academy of Technical Education, Bengaluru.

Inauguration of the Workshop by the dignitaries

Participants of the workshop with the organizing committee

JSS Mahavidyapeetha
J.S.S. Academy of Technical Education, Bengaluru
Department of Management Studies

Two days' workshop
on
Capacity Building for the Principals of JSS Technical Institutions

Programme Schedule

Day 1: 30/06/2023, Friday

(Breakfast: 9am – 9:30am)

Inauguration

Sl. No	Details	Time
1	General greetings/welcome – Dr. Pradeep M P	10.00 am-10.02 am
2	Invocation – Team of students / faculty	10.02 am -10.05 am
3	Welcome address – Principal, JSSATE, Bengaluru	10.05 am -10.08 am
4	Lighting the Lamp – All the dignitaries	10.08 am -10.11 am
5	Preamble of the workshop – JD TED	10.11 am -10.16 am
6	Address by Chief Guest – Sri. KRS	10:16 am-10:20 am
7	Keynote Address by Chief Guest – Dr. BH	10:20 am-10:50 am
8	Honouring to Guests - JD TED & Principals Vote of thanks – Dr. Chandrakala V G	10:50 am-10:55 am

Master of Ceremony: Ms. Sowmya C U., Asst. Professor; Venue: Seminar Hall - 1

| Session #	Session Details	Time	Faculty In-charge
1	Sri. K R Santhanam *Director, Accounts & Audits, JSSMVP, Mysuru*	11.10 am-11.40 am	Prof. Sowmya C U
2	Presentations by Principals about their institutions	11.40 am-12.40 pm	
3	Padmashri Dr. Prahlada Rama Rao, *Former VC, Defense Institute of Advanced Technology Pune & Former Director, DRDO*	12.45 pm – 1:30pm	Dr. Chandrakala V G
Lunch: 01.30 pm – 02.00 pm			
3	Mr. Satish Chandra, *Career Strategist, Bengaluru*	02.00 pm-03.30 pm	Dr. M P Pradeep
Tea Break: 03.30 pm – 03.45 pm			
4	Presentation by Dr. Amarjeet Singh, *Principal, JSSATEN*	03.45 pm-04.00 pm	Dr. Nagesh H G
5	Brainstorming session – *Principals, JD-TED*	04.00 pm onwards	

Day 2: 01/07/2023, Saturday

Breakfast: 9am – 9:30am

Session #	Session Details	Time	Faculty In-charge
6	Campus Tour	9:30am – 10:00am	HOD-MBA & Faculty
7	Mr. Ramani Venkat *Senior Strategic Advisor, Bengaluru*	10.00 am -12.30 pm	Dr. Lathamani B
8	Tools & Technology use – JD-TED	12:30pm – 01:00pm	
Valediction, Certificate Distribution & Vote of Thanks		01:00 pm - 01.15 pm	Prof. Chaya J Swamy
Lunch: 01.15 pm – 02.00 pm			

Workshop Schedule
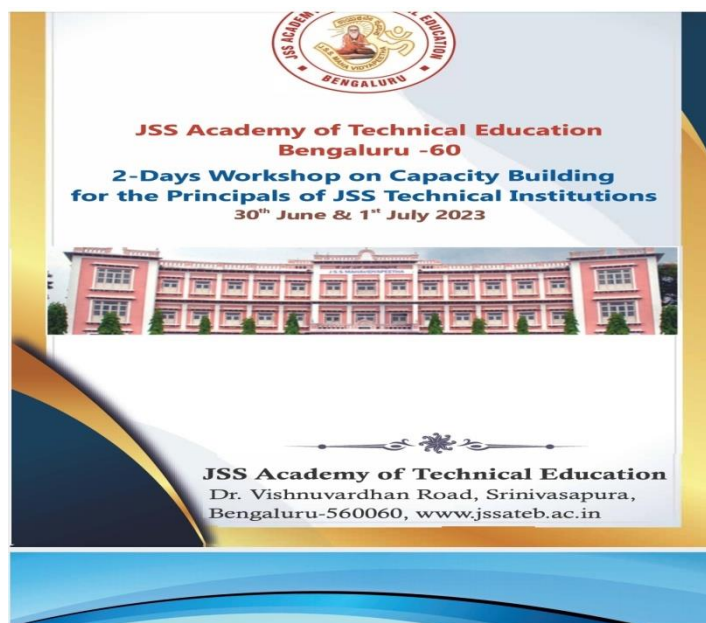
INVITATION

Master of Computer Applications (MCA)

Guest lecture session on Data Structures

Date:26.04.2023

Time:11am to 1.00 pm

Venue: Seminar Hall - 1

No of Participants: 60

Faculty Coordinators: Dr. Manjunath B Talwar & Mr. Vikyath K B

Resource Person: Prakash Hanumanthappa, Senior Technical Manager, LTIMindtree, Bengaluru

The Department of MCA, JSSATE, Bengaluru, organized guest lecture session on applications of Data Structures in industries for 1st semester students. Prakash Hanumanthappa, Senior Technical Manager, delivered the session. This event was organized in association with training and placement office, JSSATE. The resource person highlighted the importance of data structures in real time application by taking scenario based examples.

Photographs

Interdisciplinary Mastery: Unlocking Your Path to Entrepreneurial Success as a Next-Generation Problem Solver.

Date: 12-7-2023
Time:12:00 pm-1:30 pm
Venue: A302
No of Participants: 50
Faculty Coordinators: Mrs. Chandana C
Resource Person: Arun Kumar, CEO, nikki.build, Bengaluru

The Department of MCA, JSSATE, Bengaluru, organized guest lecture session on applications of Data Structures in industries for 1st semester students.During the demo, they demonstrated on: How to develop interdisciplinary skills in the domains of IoT, Robotics, AI/ML, and full stack. The significance of open-source tools and technologies and how they can be leveraged for product development. The most effective methods for practical-based learning. Industrial best practices for achieving rapid Productivity. Around 50 students got benefited from this Seminar.

Photographs