JSSATE BENGALURU

eNEWSLETTER

Volume 7 /Issue 1/October 2023

Department of Computer Science & Engineering

VISION

To be a distinguished academic and research Department in the field of Computer Science and Engineering for enabling students to be highly competent professionals to meet global challenges.

MISSION

1. Impart quality education in Computer Science and Engineering through state-of-the art learning environment and committed faculty with research expertise.
2. Train students to become the most sought-after professionals in the field of Information Technology by providing them strong theoretical foundation with adequate practical training.
3. Provide a conducive environment for faculty and students to carry out research and innovation in collaboration with reputed research institutes and industry.
4. Inculcate human values and professional ethics among students to enable them to become good citizens and serve the society.

PROGRAM EDUCATIONAL OBJECTIVES

1. Graduates shall possess essential skills to adapt to emerging technologies & environment to solve real world problems.
2. Graduates shall have required technical competency for pursuing higher studies & Research.
3. Graduates shall have essential communication and managerial skills to become competent professionals and entrepreneurs.

PROGRAM SPECIFIC OUTCOMES

1. Apply the principles of Basic Engineering Science to acquire the hardware and software aspects of Computer Science.
2. Solve the real-world problems using modeling for a specific Computer system and architecture
3. Ability to design and develop applications using various software and hardware tools.
4. Exhibit the practical competence using broad range of programming languages.

FROM THE EDITOR'S DESK

I am happy to share that the Department of Computer Science and Engineering is releasing the Volume -7, Issue-1 newsletter. The newsletter highlighted the achievements of students and faculty with respect to academics, research & Innovation, and societal activities. This newsletter will motivate the faculty and students for sharing their creativity and new ideas with the world and will help in their overall development. I take this opportunity to congratulate editor for their great effort to make this newsletter as a reality.

Dr P. B. Mallikrajuna

Associate Professor & Head

Department of Computer Science & Engg.

DEPARTMENT ACTIVITIES

Student development Program (SDP) focuses on the enhancement of the skills of the students apart from regular academic development. It aims at increasing levels of understanding of the concepts and practical implementation of knowledge along with their research aptitude. In this direction the department conducted few SDPs to strengthen the academic development of the students to enhance the required skills in the field of computer science & engineering.

Workshop on "Building a Database Application" on 14.1.23

SDP on "Introduction to Front End Engineering" on 24.1.2023

Student Awareness Program on "Social Connect and Responsibility" on 15.1.2023

Technical Tak on "Embedded systems, UEFI, BIOS and Industry Trends" on 21.2.2023

SDP : Codeathon- Coding contest on applications of Data structures in association with IamNeo on 2.3.2023

DEPARTMENT ACTIVITIES

Collaborative Practice Projects-2023 on 9.3.2023

SDP on "Design Thinking for Strategic Innovations"

JSS MAHAVIDYAPEETHA
JSS Academy of Technical Education,
Bengaluru

"KNOWLEDGE TRANSFER LECTURE SERIES (KTLS)"
an initiative from department of
Computer Science & Engineering, Research Centre

KTLS – I
Theme: "Research Methodology & Publication Ethics"
Scheduled on 2nd June, 2023 at 9:15 am, Seminar Hall- I (Hybrid Mode)
Link: https://zoom.us/j/96726952814?pwd=NjUrR0x3ZVl6UVdjV2gwdzNWN25uUT09
Resource Person:
Dr. Milli Pant, Professor & Head of the department,
Applied Mathematics & Scientific Computing,
Indian Institute of Technology, Roorkee

Research Coordinator	HOD, CSE	PRINCIPAL
Dr. Pradeep H K	Dr. Mallikarjuna P B	Dr. Bhimasen Soragaon

JSS MAHAVIDYAPEETHA
JSS ACADEMY OF TECHNICAL EDUCATION, BENGALURU

"KNOWLEDGE TRANSFER LECTURE SERIES (KTLS)"
An initiative from department of
Computer Science & Engineering, Research Centre

KTLS – II
Theme: "Computer Vision & Applications"
Resource Person:
Dr. Yogesh S Rawat
Professor, Center for Research in Computer Vision
University of Central Florida, United States

Scheduled on 31st July, 2023 at 7:30 pm IST, (Online Mode)
Link: https://zoom.us/j/92851316234?pwd=NU9mSVRoVG9aYXhRN3RvV0VVV29YUT09

Dr. Pradeep H K	Dr. Mallikarjuna P B	Dr. Bhimasen Soragaon
Research Coordinator	HOD, CSE	PRINCIPAL

OPEN DAY PROJECT EXHIBITION

JSSATE BENGALURU

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

OPEN DAY PROJECT EXHIBITION 2023

GUESTS OF HONOR

Dr.Praveen Kumar P U, Principal Engineer R&D, Valeo India

Dr. Vinay Kumar N, Solution Specialist, AIML Team, Standard Chartered Bank

Mr. Mallikarjuna Chirithanal Project Manager, Aptiv

Ms.Smitha Mahesh Associate Manager, Accenture

Mr. Ashish Pandurangi, Software Engineer, SAP Automation

Mr. Pulkit Srivastava, Product Designer, AB InBev

Mr. Manav U, Software Engineer, Walmart

Mr. Pranjal Gupta, Software Engineer, Licious

Ms. Shraddha V Prasad, Research Assistant, NITK, Surathkal

Ms. Achala Pandit, Associate Software Engineer, Accenture.

All Are Welcome

29-APR-2023
9.30 AM ONWARDS
CSE LABS, 'A' BLOCK

Coordinators
Ms Shanthala K V
Mrs. Shweta Kaddi

Dr Mallikarjuna P B
HOD

Dr. Bhimsen Soragaon
Principal

ALUMNI INITIATIVES

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Technical Talk on "Cloud Computing: Event Driven Architecture"on 24.6.2023

Seminar on "Operating Systems and Its Importance In Industry"on 11.9.2023

A talk on "Python as a Career " on 19.8.2023

OUTREACH PROGRAMS

An outreach program aims to help, uplift, and support those who are deprived of certain services and rights. It involves giving learning, social planning, health support, and other projects for their welfare. Outreach Programs through activity points helps the students to face real-time life challenges, provide the opportunity to gather data, analyse data, propose solutions and implement solutions. Also, it paves the way for personal development and creative engineers who are proud volunteers with a sense of achievement and ready to take up projects having a social impact.

Blood Donation on 12th December 2022.

Inauguration of **Patriotic Run at JSSATE**, Bengal

National Youth Day Walkathon on 12.1.2023

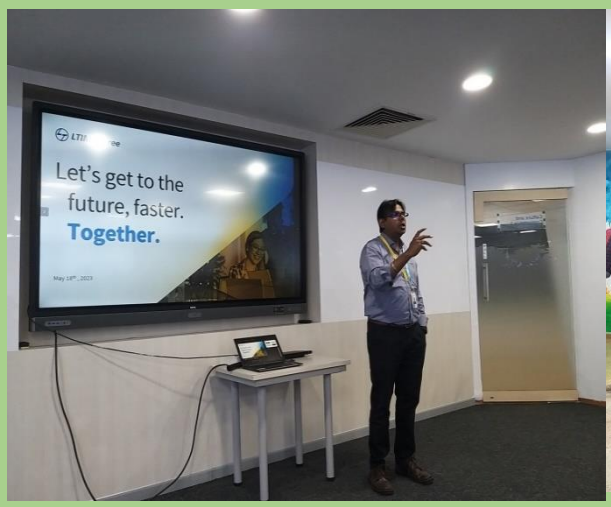
One Student One Tree on 10.8.2023

INDUSTRY VISIT

Industrial visits provide the students and faculty with an opportunity to learn practically through interaction, working methods and employment practices.

Industry Visit to ISRO on 7.2.2023

Industry Visit to Honeywell on 10.3.2023



Industry Visit to LTIMindtree on 18.5.203

STAFF ACCOMPLISHMENTS

FUNDED PROJECTS

1. Dr. Pradeep H K and Dr. Sreenatha M have been sanctioned a grant of Rs 13,50000/- for project titled "**Design of Climate Smart Agriculture (CSA) based Surface Irrigation System to Improve Water Productivity: A study of select area of Karnataka"** by Indian Council of Social Science Research (CSSR)for Precision Agriculture.
2. Dr. Pradeep H K received a grant of Rs 3,50,000/- to conduct FDP on '**Internet of Things (IoT) and Drone Technology Applications in Digital Agriculture**" by AICTE Training and Learning Academy(ATAL)
3. Dr. Niranjan C K received a grant of Rs 5000/- for the final year student project titled "**Interview Bot**" from KSCST.
4. Mrs. Snehalatha N received a grant of Rs 4000/- for the final year student project titled "**Cross Lingual Transfer Learning For Natural Language Understanding"** from KSCST.

AWARDS

1. Mr. Niranjan C K completed his Ph.D research work titled "A Unified Machine Learning Framework for Crop Management" under VTU.
2. Mr. Manjunath B T completed his Ph.D research work titled "A Machine Learning Approach for Efficient Traffic Engineering in Mobile Ad hoc Networking" under VTU
3. Mr. Sharana Basavana Gowda completed his Ph.D research work titled "Novel Techniques to Assess Software Reliability using soft computing for PaaS" under VTU
4. Mr. Sreenatha M completed his Ph.D research work titled "Design and Development of ML/DL Algorithms for Automobile Fault Diagnosis Expert System " under VTU

PUBLICATIONS

Sl. No.	Name of the Faculty	Title of the Paper	Name of the Journal
1	Dr. Niranjan C K	. A Deep Convultional Neural Network Architecture for Plant seedling classification	Engineering Technology and Applied Science Research, vol 12, No.6, Dec 2022
2	Dr. Niranjan C K	. Ensemble Efficient Net and ResNet model for Crop Disease Identification	International Journal of Intellligent Systems and Applications in Engineering. Vol. 3, Oct 2022
3	Dr. Sreenatha M	. A Fault Diagnosis Technique for Wind Turbine Gearbox: An Approach using Optimized BLSTM Neural Network with Undercomplete Autoencoder	Engineering, Technology & Applied Science Research Vol:13, Issue:1 https://doi.org/10.48084/etasr.5595
4	Dr. Naveen N C	. Performance Analysis of Poly Cystic Ovary Syndrome (PCOS) using Broyden's Kernel Import Point (BKIP) Classifier	International Journal of Intelligent Systems and Applications In Engineering Vol 10, Issue 4, Pages 307-312
5	Dr. Naidila Sadashiv	. Load Balancing in Fog Computing: A Detailed Survey	International Journal of Computing and Digital Systems, pp. 729-750, April-2023 http://dx.doi.org/10
6	Mrs. K.S.Rajeshwari	. Fault Tolerance and Energy Efficient Multi-Hop Clustering with Dual Base Stations in Large Scale Wireless Sensor Network	SN Computer Science Apr 23

7	Mrs. K S Rajeshwari	. Energy Efficient and Node Density Based Dual Base Station Deployment for Large Scale Wireless Sensor Network	International Journal of Intelligent Systems and Applications in Engineering, Vol. 11 No. 2, Pages 627-634
8	Mrs. Snehalatha N	. Customer segmentation and profiling for e-commerce using DBSCAN and Fuzzy C-Means	Proceedings of Engineering Science 10.24874/PES05.03.016
9	Mr. Vikhyath K B	. Delay Optimization and . Energy Balancing Algorithm for Improving . Network Lifetime in Fixed Wireless Sensor Network	Physical Communication – 23 https://doi.org/10.1 016/j.phycom.2023 .102038
10	Dr Prabhudev Jagadeesh	. Distributed Training of Deep Autoencoder for Network Intrusion Detection	International Journal of Advanced Computer Science and Applications,14(6), 2023. http://dx.doi.org/10.
11	Mrs.Pooja H	. Using Internet of Things (IOT) And Machine Learning (ML) Techniques For The Prediction And Classification Of Cardiac Arrhythmia	International Research Journal of Modernization in Engineering Technology and Science, Volume 5, Issue 6, Pages3543-3548 https://www.doi.org/10.56726/IRJMETS37 942
12	Dr.Niranjan C K	. Scalable Block chain Architecture: Leveraging Hybrid Shard Generation and Data Partitioning	International journal of Advanced Computer Science and Applications, vol 14, No. 8, Sept 2023

STUDENT HIGHLIGHTS

ACADEMIC ACHIEVEMENTS

R. Sahana (1JS19CS128)

- Sahana R (USN: 1JS19CS128) secured 5th Rank in 23rd VTU annual Convocation for the academic Year 2022-23.
- Mr. Balasubramanian , Mr. Pratik Rao, Ms. Jhanavi Kiran and Ms. Kadur Lohitha obtained BE Honors degree for the academic year 2022-23

PLACEMENTS

CONTENTSTACK® 12 LPA

Vibhuti Bajaj
1JS19CS191

Varun S Athreya
1JS19CS186

ribbon communications 10 LPA

M Balasubramanian
1JS19CS083

Rama Mutalikdesai
1JS19CS135

quinbay

Mukund Reddy
1JS19CS043

Anaghashree Nanda
1JS19CS023

Shubh Srivastava
1JS19CS161

INTERNSHIPS

- Total 68 students have completed the stipend internship at various companies for total amount of Rs. 52,90199-
- Mr. Varun S Athreya R and Ms.Vibhuti Bajaj have completed their stipend internship of Rs 50,000/- per month

OTHER ACHIEVEMENTS

1. Mr Ankit Kumar Updadhay(1JS19CS026) got selected for Ph.D program in Computer science at Rensselaer Polytechnic Institute, New York State with a full Scholarship Stipend of $332,200.00.
2. Mr Ankit Kumar Updadhay(1JS19CS026) won second prize in International Youth Math Challenge organized by Fabian Schneider, Online-Europe on 21/12/22.
3. Mr. Ankit Kumar Upadhya(1JS19CS026) got selected for Commitment to Action Project for e-Ankuram in Clinton Global Initiative University- Commitment to Action Project organized by Clinton Global Initiative University , Online-US in December 2022.
4. Sushma S Kalasannavar (1JS19CS192) won Bronze in International Youth Math Challenge organized by Fabian Schneider, Online-Europe on 21/12/22.
5. Rakshitha P, Sanjana R P, Sanjana S and Sireesha G got selected for State Level Seminar and Exhibition KSCST 46th Series Of Student Project Programme held at Alva's Institute of Engineering and Technology, Moodubidire.
6. Mr. Ankit Kumar Upadhya attended UNLEASH Global Innovation Lab- India 2022 sponsored by Govt. of Karnataka from 3/12/2022 to 10/12/2022.
7. Mr. Ankit Kumar Upadhya published a paper titled "XNLI 2.0: Improving XNLI dataset and performance on XLU" in 8th International Conference for Convergence in Technology.
8. Ammineni Mayukha, K Manjunath, N Akshaya, P Bhargav published a paper titled "Cardless Transactions Using Three-Factor Authentication" in National Conference on Advancements in Information Technology.
9. Meghana K R, Kavana M and Kavana C R published a paper titled " Using IOT and MLTechniques for the Prediction and classification of cardiac " in International research journal of modernization in Engineering technology and Science"

Khushi Rani
7th Semester
(1JS20CS079)

Leveraging Teaching Proficiency and Communication Skills for Technical Excellence

Effective communication and the ability to teach complex technical concepts are crucial skills for any aspiring professional in the tech industry. The capacity to explain intricate theories, algorithms, or technical designs in a clear and understandable manner can significantly impact career success, especially in technical interviews and collaborative work environments. In this article, we explore the profound role that teaching proficiency and effective communication play in the development and growth of an individual within the highly technical landscape.

The Art of Teaching in Technical Domains

Teaching technical subjects involves breaking down complex theories into more manageable components. This process demands a deep understanding of the subject matter, enabling effective simplification without losing essential details. A skilled technical teacher can adapt their teaching style to suit different learners, employing visual aids, analogies, and real-world examples to elucidate challenging concepts.

By mastering the art of teaching in technical domains, individuals not only enhance their own comprehension but also strengthen their ability to convey intricate information to peers, colleagues, or team members. This proficiency cultivates better knowledge sharing and problem-solving capabilities within a technical team.

Enhancing Technical Interviews through Teaching Skills

Technical interviews are a crucial part of the hiring process in the technology sector. Candidates with strong teaching skills have a distinct advantage during these interviews. The ability to communicate clearly and guide interviewers through the thought process behind a solution showcases the candidate's understanding and communication abilities. It reflects an aptitude for collaboration and the potential to mentor and guide fellow team members effectively.

Additionally, candidates with teaching proficiency can articulate their ideas and solutions in a structured and organized manner, providing interviewers with a comprehensive view of their technical abilities. This clarity and coherence in communication significantly influence interview outcomes and career prospects.

STUDENT CORNER

Effective Communication Skills: The Backbone of Technical Success

In the realm of technology, effective communication is can be considered similar to a well-designed algorithm as it optimizes understanding and minimizes errors. Engineers, developers, and technologists must convey complex technical ideas, requirements, or project progress in a clear and precise manner to a diverse audience, ranging from non-technical stakeholders to fellow experts.
The impact of effective communication extends beyond project-related interactions. It influences team dynamics, decision-making processes, and the overall success of a project. Clear communication fosters a culture of transparency and openness, promoting efficient collaboration and a shared vision among colleagues and team members.

The ability to teach technical concepts effectively and communicate proficiently is a fundamental skill set that transcends traditional classroom boundaries. In the rapidly evolving tech landscape, being able to convey ideas clearly and help others understand complex technical topics is a hallmark of a true professional. Technical interviews, project collaborations, and career advancements heavily rely on these skills. By refining teaching and communication abilities, individuals can unlock their potential for growth and success in the expanding and dynamic world of technology.

Veda D, 1JS22CS181

STUDENT CORNER

Ananya T, I Sem, CSE

Uttam B C, I Sem, CSE

EDITORIAL BOARD MEMBERS

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Your contribution towards the newsletter is highly appreciated and your feedback greatly aids us in improving the quality. We look forward with some more contribution in upcoming editions.