JSSATE BENGALURU

eNEWSLETTER

Volume 8 /Issue 2/Nov 2024

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

M1. Impart quality education in Computer Science and Engineering through state-of-the art learning environment and committed faculty with research expertise.

M2. 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.

M3. Provide a conducive environment for faculty and students to carry out research and innovation in collaboration with reputed research institutes and industry.

M4. Inculcate human values and professional ethics among students to enable them to become good citizens and serve the society

PROGRAM EDUCATIONAL OBJECTIVES

PEO 1: Graduates shall possess essential skills to adapt to emerging technologies and environment to solve real world problems.

PEO 2: Graduates shall have required technical competency for pursuing higher studies and Research.

PEO 3: Graduates shall have essential communication and managerial skills to become competent Professionals and entrepreneurs.

PROGRAM SPECIFIC OUTCOMES

PSO 1: Apply the principles of Basic engineering science to acquire the hardware and software aspects of computer science.

PSO 2: Solve the real-world problems using modeling for a specific computer system and architecture.

PSO 3: Ability to design and develop applications using various software and hardware tools.

PSO 4: Exhibit the practical competence using broad range of programming languages.

FROM THE EDITOR'S DESK

Welcome to this edition of our Department's Newsletter!

In today's fast-evolving technological landscape, our department remains at the forefront of equipping the next generation of engineers with the skills and expertise needed to address the challenges of tomorrow. This newsletter highlights our department's commitment to pushing boundaries and setting new standards in both academia and industry. It serves as a platform to celebrate our achievements, share knowledge, and stay connected with our ever-growing community.

This issue comprises exciting updates on student achievements, faculty highlights, industry collaborations, new research initiatives, and much more. We extend our sincere thanks to our students, faculty, alumni, and industry partners for their unwavering dedication, passion, and contributions to our vibrant department.

I would also like to take this opportunity to congratulate the editorial team for their exceptional effort in bringing this newsletter to fruition.

I am happy to share that the Department of Computer Science and Engineering is releasing the Volume-8, Issue-2 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. Prabhudev Jagadeesh

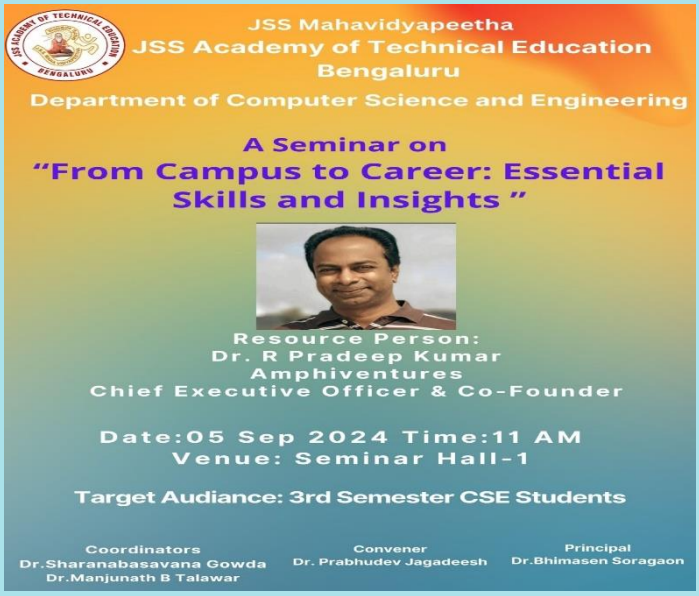
Professor & Head

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 & engineerin

Technobabble: Technical Talk on Use Case of AI in Driver Assistance on 28th Sep 2024



Seminar on "From Campus to Career: Essential Skills and Insights" on 5th Sep 2024

Workshop on "Internet of Things (IoT) using Arduino": A Hands-on approach on 12th June 2024

Technical Talk on "Storage Technologies " on 13th July 2024

OPEN DAY PROJECT EXHIBITION

The Department organized a Open Day Project Exhibition for the academic year 2023-24, showcasing the final year projects of our engineering students. This event ovided an excellent platform for students to present their work and receive critical evaluations and feedback.

. **Open Day Project Exhibition held on 4th May 2024**

ALUMNI INITIATIVES

Orientation Program- "**Pathways to Success:" Alumni Insights for freshers** on 5th Oct 2024

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.

walkathon to raise awareness about dementia on 28th Sep 2024

STAFF ACCOMPLISHMENTS

1. Dr. Pradeep H K has been selected as Faculty Intern at M/s Thales India Pvt Ltd.
2. Dr. Mallikarjuna P B has obtained DELL GenAI Foundation certification from Dell Technologies.

Ph.D *AWARDS*

1. Mrs. Rajeshwari K S completed her Ph.D research work titled **" Analysis and development of topological model to deploy a fault tolerant multiple base stations in large scale wireless sensor networks "** under VTU, Belagavi.
2. Mrs. Supriya B N completed her Ph.D research work titled **" Social Media Profiling using Ensemble Learning Techniques"** under VTU, Belagavi.

PUBLICATIONS

Sl. No.	Name of the Faculty	Title of the Paper	Details of the Journal
1	Mrs. Pooja H Dr.Prabhudev Jagadeesh	Integrated Deep Learning with Attention Layer BAsed approach for precise Biomedical Named Entity Recognition	Journal Of Advances in Information Technology, Vol 15.issue no:6,page no:704-713 , DOI: 10.12720/jait.15.6.704-713
2	Dr.Manjunath.B Talawar	A Deep Learning-Based Reliable Link Prediction Model for Achieving Traffic-Aware Routing in Mobile Ad-hoc Networks	International Journal on Artificial Intelligence Tools, Vol. 33, No. 04, 2350072 (2024)
3	Dr.Nagasundara K B	A survey on disguise face recognition	Jounal of the Chinese Institute of Engineers, 47(5),528-543,https://doi.org/10.1080/02533839.2024.2346494
4	Mrs.Snehalatha N	Sign language detection using action recognition LSTM deep learning model	IEEEXplore, doi: 10.1109/NMITCON62075.2024.10699301

PATENTS

1. Mrs. Rashmi B N filed a patent titled" **Smart Printer and Method for Document Editing".**

2. Dr. Supriya B N published a patent titled "**Artificial Intelligence-Enhanced System for Brain Tumor Detection and Diagnosis Using Convolutional Neural Networks".**

SESSION CHAIR AND INVITED TALKS

1. Dr. Prabhudev Jagadeesh chaired session at **4th International Conference on Data Engineering and Communication Systems** at RNSIT, Bengaluru.
2. Mrs. Snehalatha N was invited as a resource person for one day workshop on **" Fundamentals of Data Structures"** at JSS Polytechnic for Women, Mysuru on 26th July 2024.
3. Dr. Abhilash C B delivered a session on "**AI and GenAI in the manufacturing industry"** at HAL Bengaluru on 9th August 2024.
4. Mrs. Snehalatha N delivered a technical talk on "**Data Science and Visualization using Python**" at Department of Mangament Studies, JSSATE, Bengaluru on 6th August 2024
5. Mrs Bhavani B H delivered a technical seminar on "Pyrthon and Machine Learning" at Sanjay Memorial Polytechnic ,Sagar, Shimoga District on 13th Septemeber 2024.

STUDENT ACCOMPLISHMENTS

Three Students of 2020 Batch obtained B E Honors degree from VTU, Belagavi

Ananya P-1JS20CS028

Anusha R Mulge-1JS20CS032

Priyanka N-1JS20CS191

PLACEMENTS

Batch: 2024-25 (Ongoing)

Sl No	USN	Name of the Student	Name of the Company
1.	1JS21CS001	Abhi H B	Winwire
2.	1JS21CS009	Abhishek Kumar	Cognizant Gen C
3.	1JS21CS011	Aditi Chauhan	Cognizant Gen C
4.	1JS21CS017	Akhila V Raichur	Winwire
5.	1JS21CS018	Akrity Kumari Gupta	Cognizant Gen C
6.	1JS21CS025	Ananya Bhat	ZopSmart
			Cognizant Gen C
7.	1JS21CS029	Arjun K A	TCS
8.	1JS21CS035	Bk Barath Keshav	HashedIn
9.	1JS21CS039	Bazlah Asad	TCS
10.	1JS21CS046	Chidambar Bhat	Mu Sigma
11.	1JS21CS048	D Harshith Bharadwaj	TCS
12.	1JS21CS060	Gaana N M	Cognizant Gen C
13.	1JS21CS061	Garvit Mathur	Mu Sigma
14.	1JS21CS064	Gurunath Gadigeppa Pujar	Cognizant Gen C
15.	1JS21CS072	Induja GB	Mu Sigma
16.	1JS21CS078	Kshema Hegde	Winwire
17.	1JS21CS086	Mallikarjun Hiremath	Cognizant Gen C
18.	1JS21CS088	Manshi Negi	Winwire
19.	1JS21CS091	Monisha Prabhu	Cognizant Gen C
			Winwire
20.	1JS21CS093	N Gagan Deep	Winwire
21.	1JS21CS100	Pavana M	Mu Sigma
22.	1JS21CS105	Prajwal B	TCS
23.	1JS21CS107	Purushothaman S	Cognizant Gen C
24.	1JS21CS115	Raunak Singh Rathour	Mu Sigma
25.	1JS21CS117	Rishabh Prasad	Cognizant Gen C
26.	1JS21CS122	Sahithi Srujana C	Cognizant Gen C
			Winwire
			TCS
27.	1JS21CS134	Shreya Cs	Mu Sigma
28.	1JS21CS136	Shreya S	Cognizant Gen C
29.	1JS21CS137	Shreya Umesh Padagatti	Mu Sigma
			Winwire
30.	1JS21CS141	Siddarth Tilwani	Cognizant Gen C
31.	1JS21CS149	Sripradha Ravi	Mu Sigma
			Cognizant Gen C
32.	1JS21CS155	Sudhan S	Cognizant Gen C
			Winwire
			TCS
33.	1JS21CS158	Sukriti Jain	Cognizant Gen C

34.	1JS21CS161	Sunku Rithika	TCS
35.	1JS21CS163	Sushanth R	Winwire
36.	1JS21CS168	V. Gouthham	Cognizant Gen C
37.	1JS21CS178	Yoga Simha Vykuntam	Mu Sigma
38.	1JS21CS186	Raksha Achary	Winwire

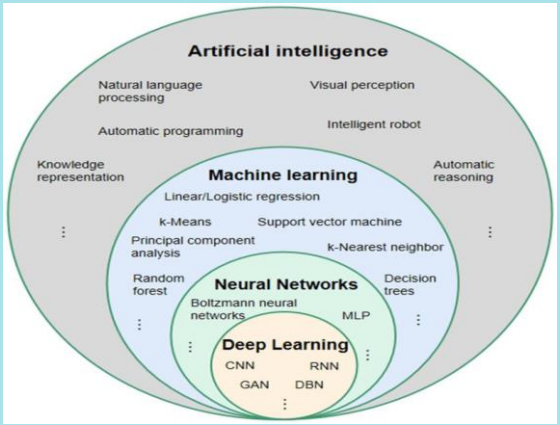
INTERNSHIPS

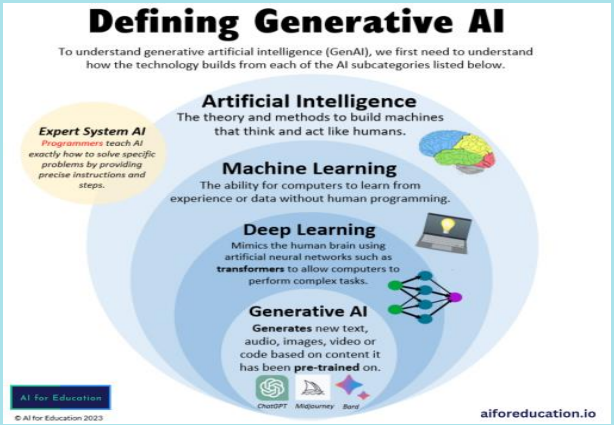
Sl No	USN	Name of the Student	Name of the Comapany	Stipend per month (in Rupees)
1	1JS21CS145	Sindhur V Shabaraya	M/s Contentstack	35,000.00
2	1JS21CS025	Ananya Bhat	M/s Zopsmart, IISc.	30,000.00
3	1JS21CS074	K Sai Sree Akshaya Gurudatta	M/s Astra	25,000.00
4	1JS21CS146	Skanda S Pouraj	Admit Scholar	30,000.00
5	1JS21CS006	Abhinav Bayary	M/s Fidelity Investments	25,000.00
6	1JS21CS035	B K Barath Keshav	M/s Nichesolv	20,000.00
7	1JS21CS158	Sukriti Jain	M/s SRF Ltd	15,000.00
8	1JS21CS029	Arjun Khadri	M/s Scikraft Education	10,000.00
9	1JS21CS140	Shubham Pandey	M/s.Elementary Minds	10,000.00
10	1JS21CS044	Bhumika Shankar	IISc, Bengaluru	-
11	1JS21CS091	Monisha Prabhu	IISc, Bengaluru	-
12	1JS21CS122	SAHITHI SRUJANA C	IISc, Bengaluru	-
13	1JS21CS129	Sharan J Negali	ADE, Bengaluru	-

TECHNICAL BLOG

Generative AI in Education: Shaping the Future of Learning

Artificial Intelligence (AI) has a rich history, dating back to the 1950s when a computer scientist created Theseus, a remote-controlled mouse capable of navigating a maze and remembering its path. Since then, AI development has been gradual, accelerating with advancements in computing power, cloud storage, and access to large datasets. Today, programs like ChatGPT allow for interactive, text-based conversations and AI applications span diverse fields—from autonomous vehicles to medical imaging analysis and airline pricing.





What is Generative AI?

Generative AI refers to a category of artificial intelligence capable of creating new content, including text, images, audio, and videos. Examples of generative AI include ChatGPT, language translators, generative adversarial networks (GANs), and various tools for text, audio, and video generation. By analyzing large datasets of human-

generated content, systems like ChatGPT, Claude, and Bard can learn patterns and relationships, using these to produce new material based on user prompts.

Generative AI's Role in Education

Generative AI is already transforming education by enhancing teaching, personalizing learning, and automating routine tasks. For instance, AI tools can now generate lessons, quizzes, and translation services, reducing educators' workloads and enhancing student engagement. Although the technology holds immense potential, it brings challenges, such as the risk of inaccurate outputs and bias in AI-generated content. With generative AI, educators can create personalized lessons catering to each student's learning style, provide interactive support, and adapt educational experiences to meet diverse needs. However, security and privacy in managing student data remain crucial.

Generative AI also lessens teachers' administrative burdens, from grading assignments to drafting communications. This frees teachers to focus on student interactions, preserving the irreplaceable human element in education. Effective use of AI tools allows educators to prepare students for a tech-driven world, balancing innovation with ethical use.

The Pros of AI in Schools

AI is significantly benefiting schools by automating tasks and allowing teachers more time for meaningful student interactions. A survey by the Association of Heads of Independent Schools of Australia (AHISA) highlighted time savings as a key benefit of generative AI tools, which teachers use to streamline lesson planning, resource creation, and individualized instruction. AI also enhances grading efficiency, offering rapid feedback and personalizing lesson plans for students with learning challenges.

The Cons of AI in Education

While AI presents exciting possibilities, it also raises concerns:

- **Bias:** AI systems may reflect biases in their training data, potentially perpetuating stereotypes or inequalities.
- **Errors:** AI-generated content may contain inaccuracies, outdated information, or misinformation.
- **Cheating:** Tools like ChatGPT can be used by students to complete assignments, raising academic integrity concerns.
- **Isolation:** Excessive reliance on AI may lead to reduced student engagement and a sense of isolation.
- **Job Displacement:** Some fear that AI might one day replace human educators.

Balancing AI's Benefits and Challenges

AI can empower teachers, accelerate learning, and personalize education, yet issues like bias and misinformation require careful oversight. Educators need to explore AI's potential responsibly to advocate for their students' best interests. By navigating AI's complexities, educators can ensure a balanced integration that maximizes benefits while mitigating risks.

Mrs. Bhavani B H
Assistant Professor
Dept. of CSE

STUDENT CORNER

Dhanya , 5*th* *CSE ‘A’*

Dhanya S, 5*th* *CSE ‘A’*

Preetham V K, I CSE 'C'

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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. Your contributions and feedback can be shared to csenewsletter@gmail.com