



Vision of the Department

To inspire and educate female students in Computer Science and Engineering to become skilled, ethical, and innovative professionals prepared for future technologies and challenges.

Mission of the Department

- M1: To provide strong foundational and advanced knowledge in core areas of Computer Science and Engineering, enabling students to design, analyse, and solve engineering problems using modern Computing tools.
- M2: To promote research skills, innovation, entrepreneurship and lifelong learning by encouraging students to participate in research, development, and interdisciplinary activities in emerging technologies.
- M3: To inculcate professional ethics, social responsibility, and sustainable practices, enabling graduates to contribute positively to society.

Program Educational Objectives

- PEO1: To acquire logical and analytical skills in core areas of Computer Science & Information Technology.
- PEO2: To adapt new technologies for the changing needs of IT industry through self-study, graduate work and professional development.
- PEO3: To demonstrate professional and ethical attitude, soft skills, team spirit, leadership skills and execute assignments to the perfection.

Program Specific Outcomes

- PSO1: **Software Development:** Ability to grasp the software development life cycle of software systems and possess competent skill and knowledge of software design process.
- PSO2: **Industrial Skills Ability:** Ability to interpret fundamental concepts and methodology of computer systems so that students can understand the functionality of hardware and software aspects of computer systems.
- PSO3: **Ethical and Social Responsibility:** Communicate effectively in both verbal and written form, will have knowledge of professional and ethical responsibilities and will show the understanding of impact of engineering solutions on the society and also will be aware of contemporary issues.

EDITORIAL BOARD

Dr. B Phijik, HOD (CSE)

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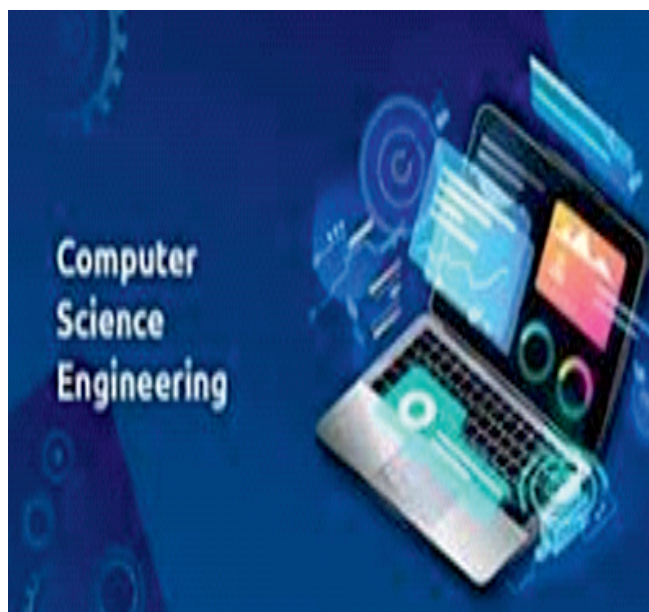
Ms. G S Yamini Devi CSE (Student)

Ms. Ojasvi Pattanaik CSE(Student)

Ms. K S Preethi, CSE(Student)

Ms. Rachel Vinitha, CSE(Student)

COMPUTER SCIENCE AND ENGINEERING



Established in 2008, the CSE Department at VMTW has grown from an intake of 90 to 240 students, reflecting its commitment to excellence. The department earned NBA accreditation in 2019 and reaccreditation in 2022, ensuring high academic standards.

With experienced and research-driven faculty, the department promotes innovation through Centres of Excellence in IoT and AI & ML and collaborations with MSME, ALEAP, and TASK. Active associations with ISTE, CSI, and IETE enrich student learning through workshops and seminars.

Boasting 90% placements in leading companies like Amazon, Flipkart, Accenture, and Cognizant, and a highest package of ₹ 20 LPA, the department stands as a hub of innovation, research, and success.



HOD'S MESSAGE

Dr. Phijik Battula,
Associate Professor &
HoD, DEPARTMENT OF
COMPUTER SCIENCE AND
ENGINEERING

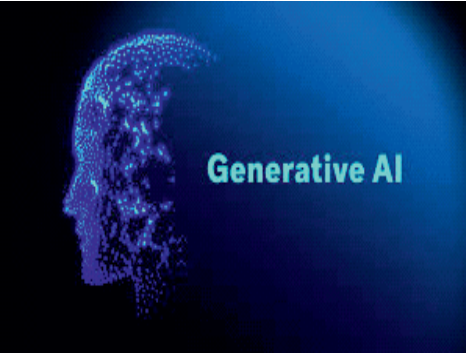
Dr. Phijik Battula brings over 20 years of academic and research experience to his role as Associate Professor and Head of the Department of Computer Science & Engineering at Vignan's Institute of Management and Technology for Women (VMTW), Hyderabad. He earned his Ph.D. in Computer Science from Osmania University, Hyderabad in 2023. He holds an M.Tech. in Computer Science and Engineering from Jawaharlal Nehru Technological University Hyderabad (JNTUH). Dr. Battula's expertise spans Computer Networks, Software Engineering, Operating Systems, Machine Learning, and Blockchain Technologies. He has made significant scholarly contributions, including: 3 national patents, 1 authored book, 10 journal publications, including (1 in SCIE-indexed journal, 4 in SCOPUS-indexed journals, 5 in UGC- approved journals, 2 international conference papers). He also served as an Academic Counsellor with the Indra Gandhi National Open University (IGNOU), Regional Services Division, Maidan Garhi, New Delhi, through Aurora Degree College Study Center (Code: 0111), Hyderabad. A dedicated mentor and educator, Dr. Battula has guided over 100 B.Tech graduates from VIGNAN's Group Institutions, Hyderabad. He is an active member of several professional organizations, Life Member, Indian Society for Technical Education (ISTE) – LM-137313, Life Member, International Association of Engineers (IAENG) – Member No: 277087, Life Member, Society of Digital Information and Wireless Communication (SDIWC) – ID: 30616.

FACULTY ARTICLE ON THE FUTURE FUSION OF BIOLOGY AND TECHNOLOGY

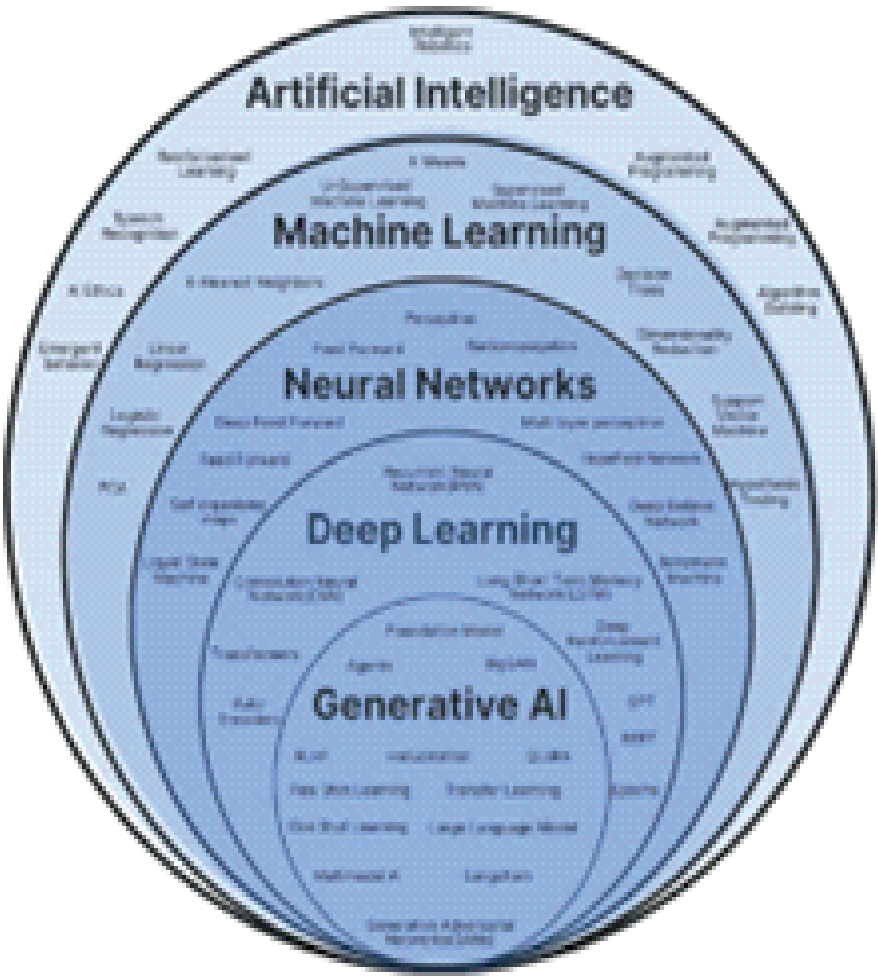
By, Krishna Nayak, Assistant Professor (CSE)

Generative AI – Redefining Creativity and Innovation

Generative AI (Gen AI) is transforming the world by enabling machines to create content—text, images, music, code, and even videos—just like humans. Unlike traditional AI that analyzes data, Gen AI learns patterns from massive datasets to generate new, original outputs.



From chatbots and digital art to drug discovery and software design, its applications are endless. Tools like ChatGPT and DALL-E have shown how technology can enhance creativity, productivity, and problem-solving.



As we move ahead, Gen AI encourages us to combine human imagination with machine intelligence, leading to a future where innovation has no boundaries.

FACULTY PUBLICATIONS

SI No	Author	Title	ISSN No	Journal name
1	Basavaraj Chunchure	Secured Data Sharing for Accountable Cloud	2581-9429	IJAR SCT
2	M.PARIMALA	AN IOT BASED CROP DISEASE RECOGNITION USING AI BASED IMAGE PROCESSING TECHNIQUES	2347-3150	Mukt Shabd Journa



This update simplifies AI development by combining data management and AI tools in one place—making MongoDB not just a database, but a complete AI-powered platform for the future.

STUDENTS ATTEMPTED COMPETITIVE EXAMS:

SI No	Roll No	Name	Exam Reg No	Name of the Exam
1	20UPIA0555	NAGACHAN DRIKA ARIGELA	2697510	GRE
2	20UPIA05F0	VANAM SHANVITHA	3970402249623285	TOEFL
3	20UPIA0565	SRINIDHI DUBBA		DUOLINGO

FACULTY ACHIEVEMENTS

S.NO.	NAME OF THE FACULTY	EVENT TYPE	DATE OF EVENT	MODE OF ATTENDING	PLACE
1.	B Mamatha	FDP-Salesforce	28.08.2023 to 01.09.2023	Offline	Anurag university-ICT academy
2.	Dr. C Srinivasa Kumar	FDP-Microsoft power BI Data analyst associate	04.09.2023 to 09.09.2023	Offline	VM TW-ICT Academy
3.	M Parimala	FDP-Microsoft power BI Data analyst associate	04.09.2023 to 09.09.2023	Offline	VM TW-ICT Academy
4.	Ms. Samreen Begum	FDP-Microsoft power BI Data analyst associate	04.09.2023 to 09.09.2023	Offline	VM TW-ICT Academy
5.	B Geetha	FDP-Microsoft power BI Data analyst associate	04.09.2023 to 09.09.2023	Offline	VM TW-ICT Academy
6.	Mr. S Ravi Kumar	FDP-Microsoft power BI Data analyst associate	04.09.2023 to 09.09.2023	Offline	VM TW-ICT Academy

STUDENT ARTICLE ON MONGODB GETS SMARTER WITH AI

By, G S Yamini Devi IV year (CSE)

MongoDB Gets Smarter with AI



MongoDB, the popular database platform, has integrated Artificial Intelligence (AI) to make app development faster and more efficient. With new Voyage AI models and the Model Context Protocol (MCP) Server, developers can now chat with their data, get smarter insights, and build advanced applications easily.

Events at Department:

Suposhan outreach program in Ramakirshna Matta



CSE students of 3rd year participated in elocution by SUPOSHAN which was conducted in the campus

Rakhi for Soldiers – A Gesture of Gratitude



As part of a patriotic initiative, the students of the Department of Computer Science and Engineering celebrated Raksha Bandhan by making handmade rakhis for Indian soldiers. The activity was organized to honor the bravery and selfless service of the nation's protectors.

Students enthusiastically crafted beautiful rakhis and wrote heartfelt messages expressing their respect and gratitude. The gesture symbolized love, unity, and appreciation for the armed forces who safeguard the nation, even while being away from their families during festivals.

CAMPUS RECRUITMENT

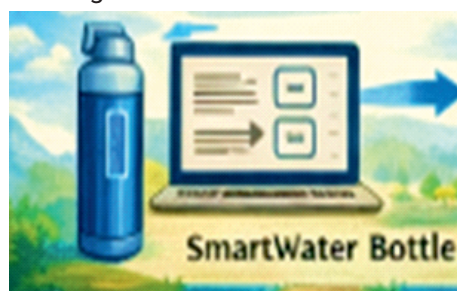
S.NO.	COMPANY'S NAME	OFFERS	PACKAGE	ROLE
1.	Cognizant	22	4 LPA	Gen C
2.	Amdocs	3	5.3 LPA	Software developer
3.	Genpact	8	5.7 LPA	Developer
4.	Tech mahindra	2	4.5 LPA	Software developer
5.	Prograd	1	6 LPA	Software developer

STUDENT PROJECTS

Smart Water Bottle:

Buchipally Vineela (20UP1A0508)

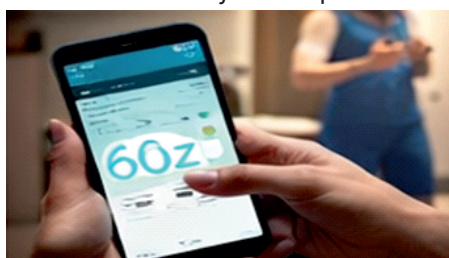
Maintaining adequate hydration is essential for regulating body functions, improving metabolism, and enhancing cognitive performance. Despite its importance, many individuals fail to consume sufficient water due to busy lifestyles and lack of awareness. A smart water bottle provides a technology-driven solution to monitor daily water intake and promote healthy hydration habits through intelligent tracking and reminders.



Existing System:

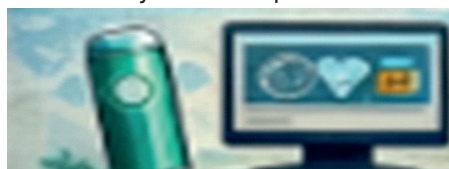
In the existing system, conventional water bottles provide no mechanism to track water consumption or alert users about hydration needs. Individuals rely

on memory or manual estimation, which often leads to irregular water intake. There is no personalized monitoring or feedback to help users understand their hydration patterns.



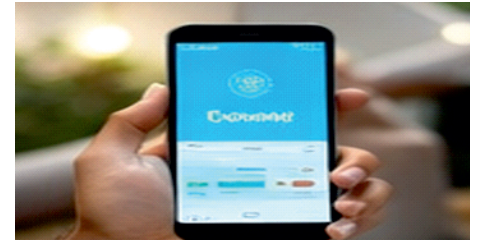
Proposed System:

The proposed system introduces a smart water bottle integrated with sensors, a microcontroller, and IoT connectivity. It accurately measures the quantity of water consumed and transmits this data to a mobile application. The application provides reminders, daily consumption statistics, and alerts based on individual hydration requirements.



Methodologies Used:

The methodology involves integrating water level or flow sensors with a microcontroller to detect consumption. IoT modules enable wireless communication with a mobile application, where data is processed, stored, and visualized. Notification and alert mechanisms are implemented to remind users to stay hydrated. This system encourages consistent hydration and promotes a healthier lifestyle using smart technology.



A Human Activity Recognition System Using Sensors in Smartphone:

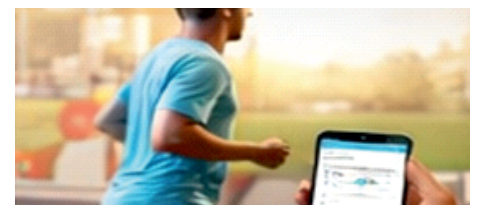
Namburi Alekya (20UP1A0536)

Human activity recognition is an important application in healthcare monitoring, fitness tracking, and assisted living systems. Smartphones are equipped with multiple sensors capable of continuously capturing motion data, making them ideal platforms for activity recognition without additional hardware.



Existing System:

Traditional activity recognition systems depend on external wearable devices or specialized equipment, increasing cost and reducing convenience. These systems often require frequent calibration and may not be suitable for continuous everyday use.



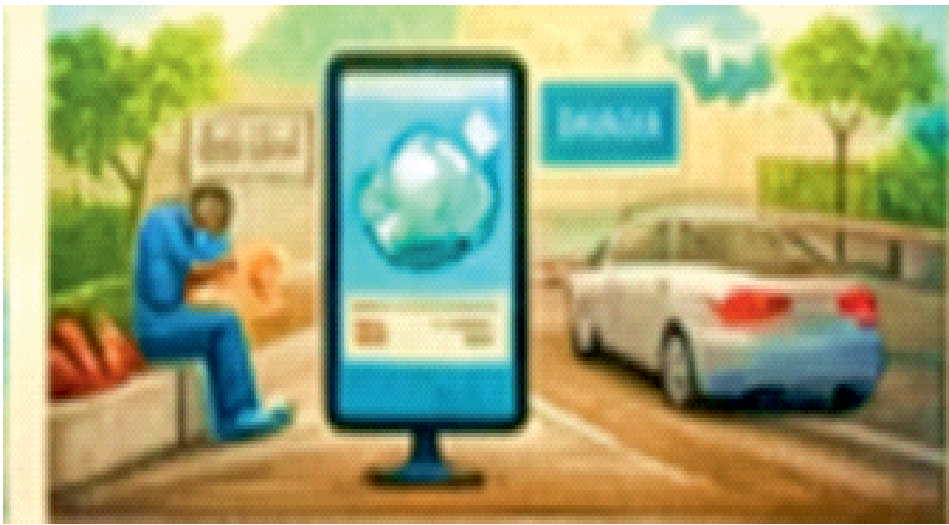
Proposed System:

The proposed system utilizes built-in smartphone sensors such as accelerometers and gyroscopes to recognize activities including walking, running, sitting, and climbing stairs. Machine learning algorithms analyze sensor data to classify activities accurately in real time.



Methodologies Used:

The methodology includes collecting sensor data from smartphones, preprocessing and filtering noise, extracting relevant features, and training machine learning models for activity classification. The trained model predicts activities based on real-time sensor input. This system provides a cost-effective, scalable, and user-friendly solution for activity monitoring.



Density Based Smart Traffic Control System:

Rallapally Sahithi (20UP1A0543)

Traffic congestion is a growing issue in urban areas due to rapid population growth and increasing vehicle usage. Inefficient traffic signal systems result in longer waiting times, fuel wastage, and environmental pollution. Density-based traffic control systems dynamically manage traffic flow by adapting signal timings based on real-time vehicle density.



Existing System:

Existing traffic control systems operate on fixed-time signal mechanisms that do not consider real-time traffic conditions. These systems fail to adapt to varying traffic density, leading to unnecessary congestion and inefficient road utilization.



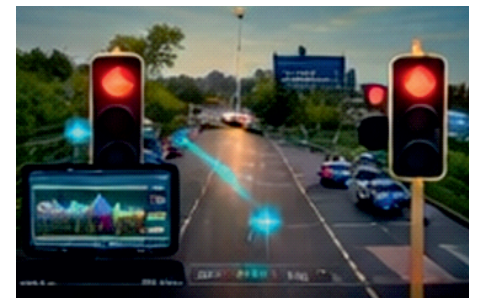
Proposed System:

The proposed system uses sensors or camera-based image processing to measure vehicle density at intersections. Based on the detected density, traffic signal timings are adjusted dynamically to optimize traffic flow and reduce congestion.



Methodologies Used:

Traffic data is collected using sensors or cameras and processed to calculate vehicle density. Adaptive control algorithms determine optimal signal timing, which is implemented in real time to manage traffic efficiently. This system improves traffic flow, reduces delays, and enhances urban transportation efficiency.



Slamify:

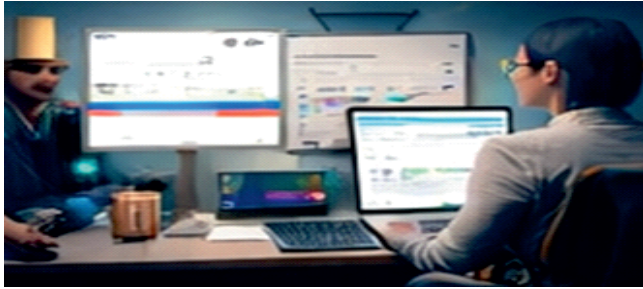
Ammathalli Udayasree (20UP1A05B1)

Slamify is a digital platform designed to streamline service management and improve user interaction through automation. It aims to simplify service access, tracking, and communication in an efficient and organized manner.



Existing System:

Manual service management systems rely on paperwork, verbal communication, and fragmented digital tools. These approaches lead to delays, data inconsistency, lack of transparency, and poor user experience.



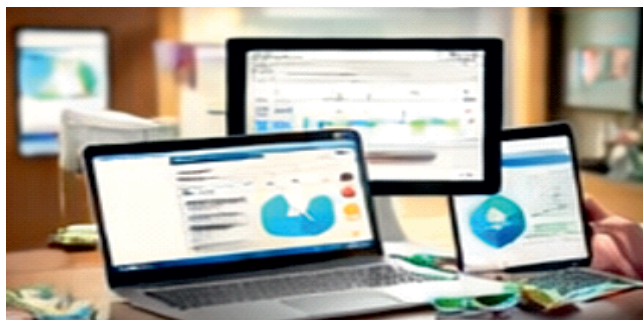
Proposed System:

The proposed system offers a centralized web-based platform where users can request services, track progress, and receive updates in real time. Automation reduces manual effort and improves operational efficiency.



Methodologies Used:

The methodology includes developing a web application with a secure backend database, implementing user authentication, automating service workflows, and enabling real-time status updates. This platform enhances service delivery efficiency and improves overall user satisfaction.



Program Outcomes (Adapted from NBA)

Engineering Graduates will be able to:

Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems

Problem Analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and Engineering sciences.

Design/Development of Solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health safety, and the cultural, societal, and environmental considerations.

Conduct Investigations of Complex Problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions

Modern Tool Usage: Create, select and apply appropriate techniques, resources and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

The Engineer and Society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

Environment and Sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts and demonstrate the knowledge of, and need for sustainable development.

Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations and give and receive clear instructions.

Project Management and Finance: Demonstrate knowledge and understanding of the engineering management principles and apply these to one's own work, as a member and leader in a team to manage projects and in multidisciplinary environments.

Life-Long Learning: Recognize the need for and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.