

Bapuji Educational Association (Regd.)

Bapuji Institute of Engineering and Technology

**ಬಾಪುಜಿ ಇಂಜಿನಿಯರಿಂಗ್ ಮತ್ತು ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯ,
ದಾವಣಗೆರೆ-577004**



An Autonomous Institute Affiliated to Visvesvaraya Technological University, Belagavi, Karnataka.
Approved by AICTE, New Delhi | Accredited by NAAC with 'A' grade and NBA (UG Programmes)
Recognized by UGC, New Delhi under 2(F) and 12(B)

Department of Computer Science & Engineering
UniCS



THE TECH MESSENGER

*News Letter - Volume of the Year
January 2025 - June 2025*

"Innovation distinguishes between a leader and a follower" — Steve Jobs.

Vision of the Institute

"To be a centre of excellence recognized nationally and internationally, in distinctive areas of engineering education and research, based on a culture of innovation and invention"

Mission of the Institute

"BIET contributes to the growth and development of its students by imparting a broad based engineering education and empowering them to be successful in their chosen field by inculcating in them positive approach, leadership qualities and ethical values "

Vision of the Department

“To be a center-of-excellence by imbibing state-of-the-art technology in the field of Computer Science and Engineering, thereby enabling students to excel professionally and be ethical”.

Mission of the Department

M1: Adapting best teaching and learning techniques that cultivates Questioning and Reasoning culture among the students.

M2: Creating collaborative learning environment that ignites the critical thinking in students and leading to the innovation.

M3: Establishing Industry-Institute relationship to bridge the skill gap and make them industry ready and relevant.

M4: Mentoring students to be socially responsible by inculcating ethical and moral values.

Program Educational Objectives (PEOs)

PEO1 - To apply skills acquired in the discipline of Computer Science and Engineering for solving societal and industrial problems with apt technology intervention.

PEO2 - To continue their career in industry/academia or to pursue higher studies and research.

PEO3 - To become successful entrepreneurs, innovators to design and develop software products and services that meets the societal, technical and business challenges.

PEO4 - To work in the diversified environment by acquiring leadership qualities with effective communication skills accompanied by professional and ethical values.

Program Specific Outcomes (PSOs)

PSO1 - Analyze and develop solutions for problems that are complex in nature by applying the knowledge acquired from the core subjects of this program.

PSO2 - Ability to develop Secure, Scalable, Resilient and distributed applications for industry and societal requirements.

PSO3 - Ability to learn and apply the concepts and construct of emerging technologies like Artificial Intelligence, Machine learning, Deep learning, Big Data Analytics, IoT, Cloud Computing, etc for any real time problems.

From the Editorial Desk...

Greetings!

We are thrilled to bring you the latest edition of the Department of CSE Newsletter. This publication is a celebration of the talent, hard work, and accomplishments of our students and faculty, showcasing their dedication to excellence both inside and outside the classroom.

The newsletter provides a platform to reflect on the various initiatives and events that have enriched our department over the past year. From faculty development programs to student-driven activities, every achievement highlights the enthusiasm and commitment that defines our community. It is our aim to share these milestones with you and inspire others to pursue similar excellence in their endeavors.

This edition serves not only as a chronicle of our department's journey but also as a testament to the collaborative spirit that drives us forward. We are proud to shine a spotlight on the diverse talents and efforts of our students and staff, whose contributions have set new benchmarks for academic and extracurricular achievements.

We warmly invite you to share your valuable feedback, comments, and suggestions to help us improve and elevate the quality of this newsletter in the future. Your insights are essential to making this publication a true reflection of our collective aspirations and growth.

Thank you for taking the time to engage with this newsletter. We hope it motivates you to strive for greater accomplishments and be a part of the exciting journey that lies ahead.

Sd/-

The Editorial



Message from the HOD's Desk

It gives me great pleasure to present the 2025 edition of the Department of Computer Science & Engineering newsletter, "Tech Messenger." This publication reflects the innovation, achievements, and collaborative spirit that define our department.

Through our "Strong Alumni and Industry Connect" initiative, we strive to make our students industry-ready through hackathons, coding challenges, real-time projects, and awareness programs. Faculty members are equally encouraged to pursue impactful research in a supportive environment. Our forum, "UniCS," continues to nurture and showcase the talents of our students.

This year, we organized a range of events, including technical talks, alumni sessions, workshops, and FDPs, in collaboration with industry experts and alumni. These activities bridge the gap between academics and industry while fostering professional growth.

I congratulate the editorial team for their exceptional effort in compiling this newsletter, highlighting our department's journey from January to June 2025. Wishing them continued success in future editions.

Dr. Nirmala C.R.
Dean of Placements
Professor & Head
Department of Computer Science & Engineering

Advisory Board:

- Prof. Y. Vrushabhendarappa – Director, BIET
- Dr. Aravind H. B. – Principal, BIET
- Dr. Nirmala C. R. – Dean of Placements
Professor and Head,
Department of CSE

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Assistant Professor
- Prof. Gangamma Hediylad,
Assistant Professor

Associate Editors:

- Dhyaan J N
Magzine Secretary - CSE
SWC 2024-25
- Dhruva N R
Green Campus Secretary-CSE
SWC 2024-25

FDP/WORKSHOP ATTENDED

- Prof. Raghu B R and Prof. Jagadesh A N had attended ATAL FDP on “**Deep Dive into AI**” organized by Reva Institute of Technology and Management, Bengaluru from 13/01/2025 to 18/01/2025.
- Faculty members of the CS&E department had attended one week FDP on “**Generative AI and DevOps**” organized by E&ICT Academy IIT Guwahati held from 17 - 22 February, 2025 in association with BIET Davangere.
- Prof. Anusha N had attended one week ATAL FDP on “**Generative AI – Democratization of AI, Responsible AI**” organized by the E&C dept, BIET from 17th to 22nd February 2025.
- Prof. Waseem Khan and Prof. Vinayak P had attended 5-day FDP on “**Cloud Computing and its Security**” organized by E&ICT Academy IIT Guwahati held from 17 - 21 March, 2025 in association with BIET, Davangere.
- Prof. Radhika Patil, Prof. Chandrashekar M V had attended 5-day FDP on “**Cloud Computing and its Security**” organized by E&ICT Academy IIT Guwahati held from 17 - 21 March, 2025 in association with BIET, Davangere.
- Dr. Jyothi G C and Prof. Preethi B had attended 5-day FDP on “**Cloud Practitioner (AWS)**” conducted by ICT Academy on 03 Mar 2025 to 07 Mar 2025 at BIET.
- Dr. Gururaj.T, Prof. Gangamma.H, Prof. Archana T C, Prof, Mohammed Muthair R had attended “**MongoDB Certification Course**” offered by MongoDB.
- Prof. Chandrashekar M V had attended “**Research and Publication Ethics (RPE)**” course offered by NPTEL.
- Prof. Nomitha Chawla had attended “**Introduction to OpenAI GPT Models and OpenAI Generative Pre-Trained Transformer 3 (GPT-3) for Developers**” course offered by Infosys Springboard.
- Prof. Vinayak P had attended 5-day FDP on “**Advanced Cybersecurity**” at VTU Belagavi from 02-06-25 to 06/06/25.
- Dr. Naseer R had attended two-week FDP on “**Computing Systems**” at IIT Bombay from 23-06-25 to 05-07-25.

EVENTS ORGANIZED IN THE DEPARTMENT

- The Department of CSE organized a one-week Faculty Development Program on "**Generative AI and DevOps**" from 17/2/25 to 22/2/25. The program was conducted in collaboration with the Electronics & ICT Academy, IIT Guwahati. The FDP was delivered by eminent resource persons Ms. Usha Rengaraju, Chief Data Scientist, Corporate Trainer, and Founder of NeuroAI, and Mr. Wasim Buden, Vice President of Aion Nimbius, Cloud Solutions.



Glimpses of the event

- The Department of CSE is hosted a 6-days workshop on “**AI-enabled Office Assistance Tools**” for office staff of BIET from 3/3/25 to 8/3/25. The workshop aims to train participants in using AI tools to automate tasks, improve productivity, and optimize office workflows, with the outcome being enhanced efficiency, better decision-making, and streamlined administrative operations for the office staff.



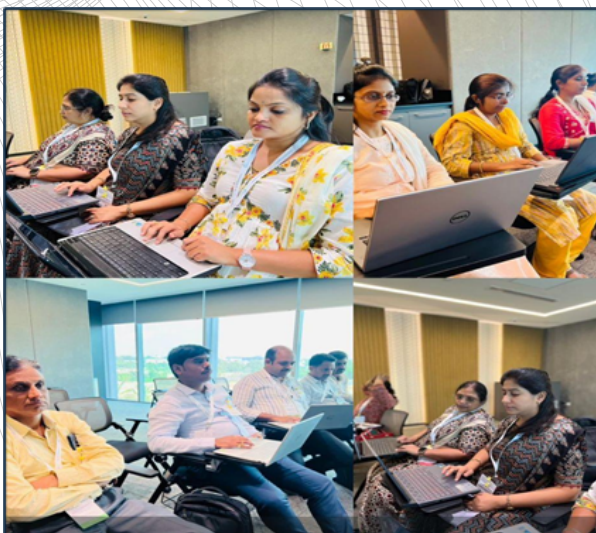
Glimpses of the event

- On February 27, 2025, CSE faculty members Dr. Jyothi G C, Dr. Naresh Patel K M, Dr. Anusha R, Dr. Usha G R, and Prof. Shankar Sarji visited R V College of Engineering, Bangalore. During their visit, they toured the college's skill centers, as well as the Data Centre, IoT Centre, and various clubhouses. They gained valuable insights into the collaborative work and the numerous activities on campus aimed at enhancing students' skills.



CS&E Team interacting with The Principal Dr. K N Subramanya, Dr. Mamatha G.S, Dr. Sagar B.M Professors of RVCE

- On June 9, 2025, Dr. Nirmala C. R along with CSE faculty members, attended the **Conclave on Transforming Campus Preparedness through Generative AI**. This event was specially curated for VTU engineering college faculties, held at the Google Office, Bengaluru.



Glimpses of the event

- The CSE Department, under the “UniCS” forum, organized a Faculty Think Tank **"Bridging Academia and Industry with Generative AI, Agentic Intelligence, and Cloud Innovation"**, Lakshmi Shastry, Enterprise Architect at Brillio, Bengaluru, as the resource person for the session. The event was conducted for faculty members of CSE and allied branches on 14 June 2025. Around 75 teaching faculty members across the various departments had attended the event.



Glimpses of the event

- In celebration of our Hon. Secretary Dr. Shamanur Shivashankarappa ji's 95th Birthday, a **Plantation Ceremony** was held on June 16, 2025 near Amrutha Hostel. Faculties of the CSE Department actively participated in the event, contributing to the plantation drive organized for the occasion.



Faculty members involved in the plantation activity.

- The CSE department added another feather to its cap by winning the **runner-up title at Davana 2025**.



Glimpse of the event

STUDENTS ACTIVITIES/PROGRAMS ORGANIZED

- Department of CSE organized a Bootcamp on "**Generative AI**" for 4th semester students of all branches on 20 February, 2025. The resource person for the event was Ms. Usha Rengaraju, Chief Data Scientist, Corporate Trainer, and Founder of NeuroAI.



Around 750 Students had attended the event.

- As per the VTU syllabus, **Project Work Synopsis Presentation Phase-I (21CSP76)** for 8th semester students was scheduled on March 3, 2025. It allows students to present their project's progress, objectives, and methodology. Faculty feedback during this session helps refine the projects for final submission and evaluation.



Glimpses of the event

- Under the Opticode Coding Club, CSE dept. organized a **Competitive Coding Sprint** (focused on C programming) for all CSE and aligned branch students on March 7, 2025. The event was centered around debugging, where participants analyzed and fixed faulty C programs to enhance efficiency. Over 40 students took part in the competition.



Glimpses of the event

- The final-year students enrolled under the Rومان Technologies presented their **Internship Project Assessments** on March 7, 2025 and the final-year students enrolled under the Super Mentor Technologies presented their Internship Project Assessments on April 11, 2025.



Glimpse of the event

- Under the UniCS forum, CSE department organized **TCS Techbytes** – Inter-Department Quiz on March 10, 2025. The event aimed to promote technical knowledge and cross-department interaction among students. Topics included emerging technologies, computing fundamentals, and logical reasoning.



Glimpses of the event

- As per the VTU syllabus, **Technical Seminar Presentation (21CS81)** for 8th semester students was scheduled from 17/03/25 to 21/03/25. It allows students to foster their critical thinking, enhances presentation skills, and encourages students to stay updated with industry trends, ultimately preparing them for their professional careers.



Glimpse of the event

- Under EDC, The Department of CSE organized “IDEATHON-2025” for all higher semester students of various branches on March 21, 2025. Additionally, an awareness program on “MANTHAN” was held on March 24, 2025.



Glimpses of the event

- Department of CS&E organized an **Online Technical Session on MongoDB** for 4th semester students on 8 April, 2025. Saumya Shah (Operation Specialist, MongoDB, Mumbai) and Basavadarshan G N (Senior Academic Partnership Manager, MongoDB, Bengaluru) were the speaker for the session.



Glimpse of the event

- On April 10, 2025, 6th semester students visited **Smart City Davanagere** to bridge curricular gap between academia and industry for the cloud computing course.



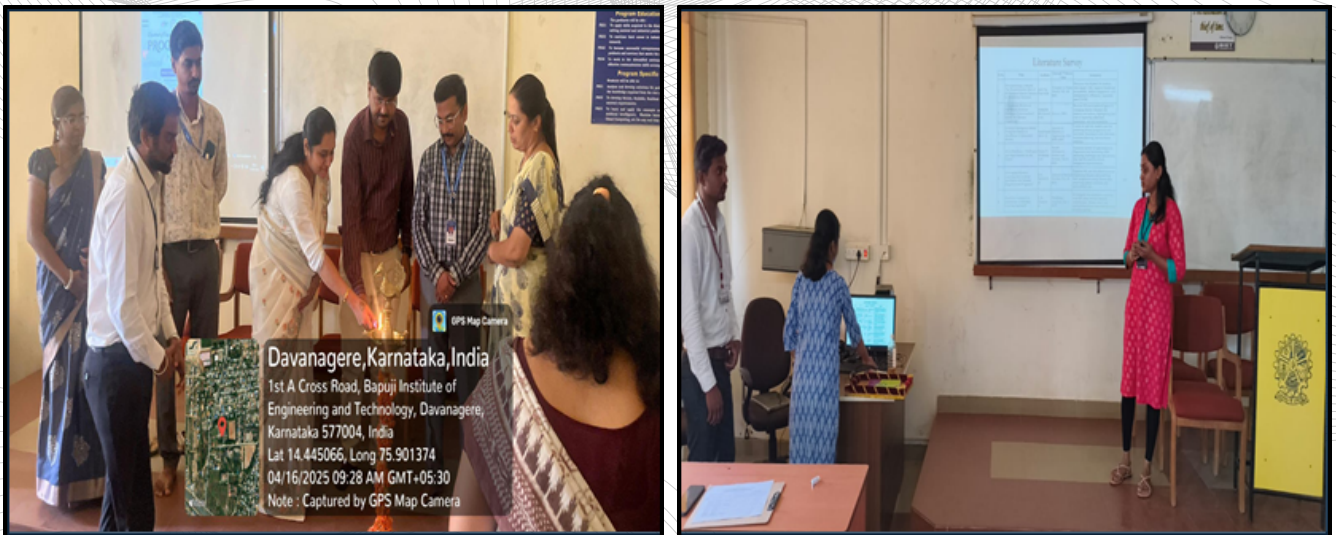
Glimpse of the event

- Department organized a 3 days workshop on "**Cloud Computing with AWS**" for 6th semester students from 15/4/25 to 17/4/25. The resource person for the event was Mr. Sathish Shettar, Technical Architect, Cloud & DevOps.



Glimpse of the event

- As per the VTU syllabus, **Major Project Final Phase Presentation (21CSP76)** was conducted along with “**PROGYAN 7.0: Inhouse Project Exhibition**” for the 8th Semester students scheduled on 16 April, 2025. Dr. Aziz Khan F Pathan (JITD), Dr. Latharani T R (JITD) & Prof. Kotreshi S N (GMIT) were the Project Evaluator from outside the institution.



Glimpses of the event

- As per the VTU Syllabus for 2021 Scheme, the National Service Scheme (NSS) presentation and assessment for 8th semester students was scheduled on 17/04/2025.



Glimpse of the event

- CSE Department organized a Skill Development Program on **Advanced Data Structures and Algorithms** from 5/5/25 to 15/5/25 for 6th semester students. It was conducted in association with Tri-Pillar Solutions, Bangalore with resource persons Mr. Raushan Kumar Baitha, Mr. Nirmal Shekhar, and Mr. Saurav Jyothi Sarkar. The sessions focused on enhancing coding skills and algorithmic understanding through hands-on training.



Glimpses of the event

- In association with Edunet Foundation, CSE organized a Skills4Future workshop on **Green Skills and AI Expertise** from 5/5/25 to 9/5/25, for 4th semester students, the program features expert sessions by resource persons Mr. Sanjay S C, Mr. Vishwas U K, and Mr. Sarthak Narnor, all Master Trainers from Edunet Foundation. The workshop aimed to equip students with practical skills in sustainable technologies and artificial intelligence, fostering industry readiness and enhancing their technical and problem-solving capabilities.



Glimpses of the event

- In collaboration with Talent Battle the Training & Placement department conducted **Placement Training Program** for 6th sem students from 10/02/25 to 25/02/25. The Training Program gives essential knowledge to students because it bridges the gap between academic knowledge and industry expectations. (209 CSE students attended the session for 15 days).



Glimpses of the event

- Training and Placement department has conducted an **Orientation Session Program** by Fresher Profiles Director Mr. Shivaprasad for the pre-final year CSE students on 3 March, 2025. The Purpose of their visit to provide the guidance on the usage of the platform.



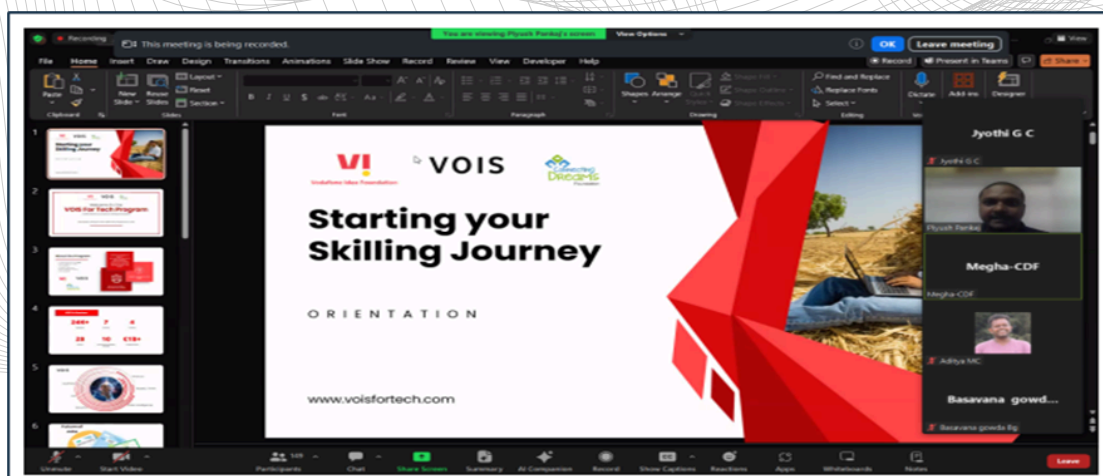
Glimpse of the event

- Training and Placement department has conducted a Technical Talk on **Preparing for Future of Work leading to Career Sustainability by Employability Life**, the session was addressed by Mr. Raja Dasgupta CEO of Employability Life and Ms. Ruchika Sarna Vice President of Employability Life for CSE and aligned branch students on 16 April, 2025.



Glimpses of the event

- CSE Dept conducted the **"VOIS for Tech: University Engagement Program"**, a CSR initiative and executed by Vodafone Intelligent Solutions (VOIS) on 11 June, 2025 through online mode for all 2nd semester students across branches. The session aimed to enhance students' employability through industry-relevant skills. Mr. Piyush Pankaj, Master Trainer from Edunet Foundation, Bengaluru, was the resource person.



Glimpse of the event

- The Department of CSE organized **Project XPO 1.0** on June 19, 2025, with the theme "**Unleashing Young Logicians in C**" and "**PyStart – Python Mini Projects That Make Big Impact**" on June 20, 2025. Both events showcased mini projects by 2nd semester students, encouraging hands-on learning and fostering logical thinking through practical application of programming concepts.



Glimpses of the event

PAPER PRESENTED /PUBLISHED by faculty

- Dr. Naveen.H.M published a paper titled “**An application of FCM and CNN for Efficient Lung Segmentation**” in IAENG (Scopus indexed journal-Q3).
- Prof. Waseem Khan published a paper titled “**Zero-Day Vulnerability Detection: Integrating Cognitive Computing and Threat Intelligence**” in YMER Digital Journal, DOI:10.37896/YMER23.12/84 (Scopus indexed journal-Q4).
- Prof. Anu C S, Dr. Nirmala C R published a paper titled “**Performance Assessment of Various Ensemble Learning Models for Crop Yield Forecasting**” in Karbala International Journal of Modern Science (KIJOMS), University of Karbala.Scopus (Q2)
- Prof. Anu C S, Dr. Nirmala C R published a paper titled “**Crop yield prediction using Ensemble learning model**” in IAENG international journal of Computer Science. Scopus (Q3)
- Prof. Arjun H, Dr. Gururaj T published a paper titled “**Non-Tumorous Facial Pigmentation Disorder using Ensemble and Deep Learning- A Review**” in JSEE, Volume 35 Issue 1 2025, DOI: 20.14118.jsee.2025.V35I1.2111.
- Dr. Santosh K C published a paper titled “**Prompt Bridge: A Multilingual Prompt Engineering Framework to Bridge Language Barriers in AI Communication**” in International Journal of Advances in Engineering and Management (IJAEM).
- Dr. Anusha R presented a paper titled “**Hybrid Feature Model Enabled Age Prediction Using Wearable Sensor-based Gait Analysis**” in 16th International IEEE Conference on Computing, Communication and Networking Technologies (ICCCNT 2025) to be held at IIT Indore.
- Dr. Anusha R presented a paper titled “**Gait Recognition Module Based on Metrics for Speed-Invariant Classroom Attendance System**” in 3rd International Conference on Microwave, Optical and Communication Engineering (ICMOCE 2025) to be held at IIT Bhuvaneshwar.

- Prof. Vishwanath V K published a paper titled “**A survey on Task Offloading in Container-Based MEC: Strategies, Techniques and Impact on Quality of Experience**” in Journal of Basic Science and Engineering.
- Dr. Naresh Patel K M published a paper titled “**Federated Learning-Based Privacy-Preserving Electronic Healthcare Data Management Using Fuzzy Logic**” in Journal of Information Systems Engineering and Management.
- Dr. Naseer R published a paper titled “**Framework for Cloud Data Security Using Agentic AI**” in IJSRA Journal. <https://doi.org/10.30574/ijsra.2025.15.1.1255>
- Prof. Gangamma G H published a paper titled “**A Novel Adaptive Ensemble Learning Approach for Driving Factor Identification in Land Degradation**” in Engineering, Technology & Applied Science Research.
- Prof. Radhika Patil, Dr. Nirmala C R published a paper titled “**A Novel Deep Enhanced Bias-Aware Sequence Network for Accurate Telecom Customer Churn Prediction**” in Engineering, Technology & Applied Science Research.
- Prof. Nomitha Chawla, Dr. Nirmala C R published a paper titled “**A Comparative Study on Brahmi Script Character Recognition**” YMER Digital Journal, DOI: 10.37896/YMER24.01/60
- Dr. Usha G R published a paper titled “**Blog Classification on Twitter Dataset using Weighted Embedding Technique with ARSO based LSTM Model**” in Journal of Information Systems Engineering and Management.

PLACEMENT DETAILS

SL.N o	Industry Name	No.of students
1	QSpiders	25
2	TCS Ninja	22
3	Tech Mahindra	13
4	KPMG	12
5	Kasmo	12
6	Palle Technologies	11
7	IBM	08
8	Pentagon Space	08
9	Echo Brains	08
10	GenZ Educate Wing	08

11	Cognizant	08
12	Code Young	07
13	Intrains	06
14	TAP Academy	06
15	SkyllX Technologies Private Limited	06
16	Friss India	06
17	ThinkSync	06
18	Dhee coding Labs	05
19	X-Ciencia	02
20	Ingest Labs	02

21	Cognizant -Genc	02
22	INube	01
23	Zosh	01
24	Ninjacart	01
25	Coditas	01
26	Infosys Ltd.	01
	Industries Contacted for Placements	30
	Total no. of Students Placed	123
	No. Students with Multiple offers	51

Faculty Corner

Raghu B R

Assistant Professor

CS & E Dept. BIET, Davangere-04

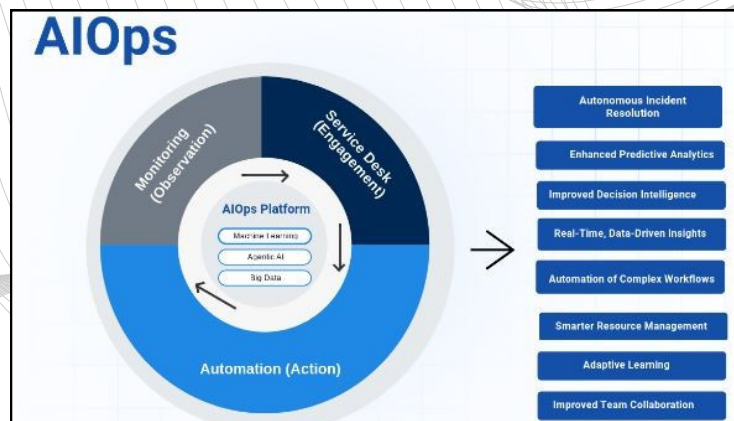


Preemptive AIOps : The Next Frontier in Enterprise Infrastructure Resilience [Datacenter Infrastructure]

Moving beyond reactive telemetry and predictive alerts to programmatic self-healing systems.

For the past decade, Artificial Intelligence for IT Operations (AIOps) has fundamentally transformed how enterprise organizations handle system alerts, logs, and telemetry. However, traditional AIOps architecture remains structurally tethered to a reactive paradigm. It waits for a threshold abnormality to trigger an anomaly detection model, summarizes the incident, and hands it off to an on-call engineer. While this compresses Mean Time to Resolution (MTTR), it still accepts downtime as an inevitability.

Enter Preemptive AIOps. Representing the latest shift in digital immune systems, Preemptive AIOps decouples from traditional 'break-fix' metrics. By blending continuous causal reasoning engines with dynamic, zero-touch automated playbooks, Preemptive AIOps models isolate, simulate, and remediate systemic software degradation before any user-facing symptoms materialize.



The Core Architectural Pillars

Unlike standard predictive maintenance models that rely purely on time-series correlation, Preemptive AIOps operates through three decoupled, tightly integrated structural pillars:

- Continuous Deep Causal Telemetry:** Traditional tools monitor metrics, events, logs, and traces (MELT). Preemptive AIOps layers structural causal models (SCMs) over this pipeline to understand the exact dependency topology of distributed microservices, mapping not just that two events happened together, but how one forced the other.
- Micro-Simulation and Digital Twin Testing:** The system actively clones parts of live production workloads into sandbox environments. It subjects these 'digital twins' to synthetic stress environments to actively uncover latent race conditions, memory leaks, or thread-locking bugs before they strike real-world instances.
- Closed-Loop, Zero-Touch Remediation:** Once a ticking system anomaly is detected, the engine doesn't simply log a ticket. It orchestrates automated configuration updates, auto-scales micro-clusters, or re-allocates network routes dynamically through verified infrastructure-as-code updates.

Conceptual Pipeline: Preemptive vs. Reactive Engineering

REACTIVE / PREDICTIVE AIOps (Incident Management Track)	PREEMPTIVE AIOps PIPELINE (Autonomous Self-Healing Track)
[1] Telemetry Gathers Metrics	[1] Real-time Causal Dependency Mapping
[2] Anomaly Breaches Fixed Threshold	[2] Continuous Live Digital Twin Stressing
[3] Alert Generated & Consolidated	[3] Root-Cause Pre-isolation via SCMs
[4] Human Engineer Page Dispatched	[4] Automated Self-Healing Orchestration
Result: High MTTR & Post-Facto Recovery	Result: Near Zero Downtime & MTTR Avoided

Operational Differences: A Direct Comparative Analysis

To understand the paradigm shift, we must look at how core infrastructural operational vectors are reassessed under a preemptive architecture compared to traditional setups

Vector	Predictive / Reactive AIOps	Preemptive AIOps
Primary Metric	Mean Time to Resolution (MTTR)	Mean Time Between Failures (MTBF) Optimization
Data Domain	Historical telemetry metrics and event logs.	Dynamic Causal Graphs and production digital twin simulators.
Trigger Action	Alert creation upon crossing safe baseline thresholds.	Silent, autonomous system execution before deviation happens.
Human Element	On-call SRE triage and code debugging.	Continuous policy definition and systemic guardrail auditing.
Risk Profile	High risk of service degradation during triage.	Zero impact due to isolation and traffic re-routing loops.

Implementing Preemptive Frameworks: Challenges and Guardrails

Transitioning to an completely autonomous operations ecosystem requires overcoming systemic trust barriers. The primary threat within closed-loop preemptive remediation is the danger of positive feedback loops. If an AI engine remediates a perceived microservice slowdown by allocating additional compute resources, but the root bottleneck is an unoptimized database query lock, the system could spin up instances exponentially, draining resources without fixing the error.

To safeguard against automated architectural loops, modern preemptive configurations enforce deterministic policy guardrails. These constraints isolate remediation scripts to sandboxed boundaries and require human confirmation loops for high-blast-radius operations like global CDN routing changes or primary database migrations.

The Future of Zero-Downtime Infrastructure

Preemptive AIOps shifts enterprise IT from defensive, fire-fighting structures into offensive engineering setups. As distributed cloud clusters expand into billions of interdependent configurations, human cognitive limits can no longer track systemic failure paths. By treating infrastructure anomalies as clear, mathematically provable causal paths rather than random emergencies, Preemptive AIOps marks the definitive transition to truly self-healing enterprise architecture.

Student Corner

Ayush R
4BD23CS029
5TH Semester



The Rise of Artificial General Intelligence (AGI): Beyond Today's AI

Artificial Intelligence has rapidly evolved from simple rule-based systems to powerful models capable of writing code, generating images, and solving complex problems. Yet, these systems are examples of Narrow AI, they excel at specific tasks but cannot think or learn beyond their training. The next frontier is Artificial General Intelligence (AGI), a form of AI that can understand, reason, learn, and adapt across diverse domains, much like a human being. Unlike today's AI, AGI would not need separate training for every task; it could apply knowledge from one field to another and continuously improve through experience.

Recent breakthroughs in large language models, autonomous AI agents, and multimodal systems have accelerated discussions about AGI. While experts differ on when AGI might become a reality, many believe that today's AI innovations are laying its foundation. Researchers are focusing on creating systems with stronger reasoning abilities, long-term memory, and better decision-making rather than simply generating faster or larger models. This shift represents a move from AI that follows instructions to AI that can independently solve unfamiliar problems.

The potential impact of AGI is enormous. It could revolutionize healthcare by accelerating drug discovery, transform education through highly personalized learning, optimize scientific research, and address global challenges such as climate change. At the same time, AGI raises important questions about ethics, safety, privacy, employment, and governance. Ensuring that such systems remain aligned with human values will be one of the greatest engineering challenges of this century.

Echoes of Tomorrow

Within these halls where bright dreams grow,
We plant the seeds the future will know.
With every lesson, every stride,
We shape our hopes with humble pride.

Through laughter shared and trials faced,
Our strongest memories are embraced.
Each page we turn, each goal we chase,
Leaves lasting footprints time can't erase.

Though seasons change and years may fly,
Our spirits soar beneath one sky.
Together we rise, together we shine,
Forever this journey is yours and mine.



Akshay Bhat K
4BD23CS008
5th Semester

ಮೊದಲ ಮಳೆ

ಮೋಡದ ಮಡಿಲಿಂದ ಮುತ್ತಿನ ಹನಿ,
ಮಣ್ಣಿನ ಮೌನಕೆ ಮೂಡಿತು ಧ್ವನಿ.
ಒದ್ದೆಯ ನೆಲದಲಿ ಉಸಿರೊಂದು ಮೂಡಿ,
ಒಲವಿನ ನೆನಪುಗಳೆಲ್ಲವು ಕೂಡಿ.

ಹನಿಹನಿಯ ತಾಳಕೆ ಎಲೆಗಳ ನಾಟ್ಯ,
ಗಾಳಿಯ ಗುನುಗಿನಲ್ಲಿ ಜೀವದ ಗಾಥೆ.
ಮಣ್ಣಿನ ಪರಿಮಳ ಮನದಾಳ ತುಂಬಿ,
ಮರೆತ ಕನಸುಗಳ ಬಾಗಿಲು ತೆರೆದು ನಿಂಬಿ.

ಮಳೆಯ ಈ ಗೀತೆ ಕ್ಷಣಿಕವಲ್ಲ,
ಜೀವನದ ಜಾಡಿಗೆ ಶಾಶ್ವತ ಬೆಳ್ಳಿ.
ಭೂಮಿಯ ನಗುವೇ ಈ ಮಳೆಯ ಕಾಣಿಕೆ,
ಮಾನವನ ಹೃದಯಕೆ ಪ್ರಕೃತಿಯ ವಂದನೆ.



Prajwal S Patel
4BD23CS142
5th Semester

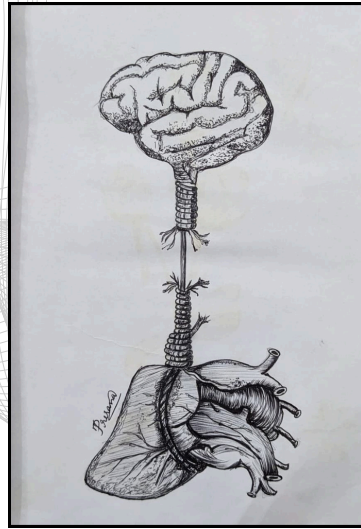
Art Gallery



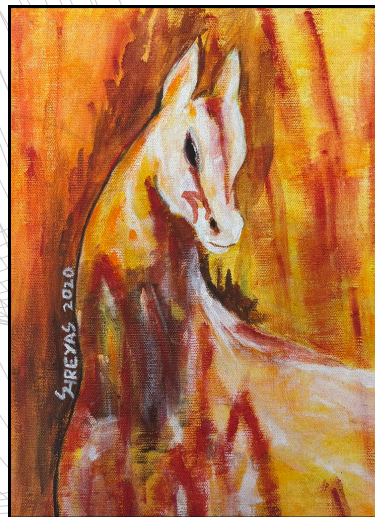
Sandhya Belavi
4BD23CS182
5th sem D section



Sanjana N
4BD23CS188
5th sem D section



Prerana H D
4BD23CS150
5th Sem D Sec



Shreyas B P
4BD24CS146
3th Sem C Sec



The Tech Messenger
Department of Computer Science & Engineering
Bapuji Institute of Engineering and Technology
Davangere - 577004

Bapuji Educational Association (Regd.)

Bapuji Institute of Engineering and Technology

**ಬಾಪುಜಿ ಇಂಜಿನಿಯರಿಂಗ್ ಮತ್ತು ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯ,
ದಾವಣಗೆರೆ-577004**



An Autonomous Institute Affiliated to Visvesvaraya Technological University, Belagavi, Karnataka.
Approved by AICTE, New Delhi | Accredited by NAAC with 'A' grade and NBA (UG Programmes)
Recognized by UGC, New Delhi under 2(F) and 12(B)

Department of Computer Science & Engineering
UniCS



THE TECH MESSENGER

NEWS LETTER - VOLUME OF THE YEAR

JULY 2025 - DECEMBER 2025

"Failure is success in progress" — Albert Einstein.

Vision of the Institute

"To be a centre of excellence recognized nationally and internationally, in distinctive areas of engineering education and research, based on a culture of innovation and invention"

"BIET contributes to the growth and development of its students by imparting a broad based engineering education and empowering them to be successful in their chosen field by inculcating in them positive approach, leadership qualities and ethical values "

Vision of the Department

"To be a center-of-excellence by imbibing state-of-the-art technology in the field of Computer Science and Engineering, thereby enabling students to excel professionally and be ethical".

Mission of the Department

M1: Adapting best teaching and learning techniques that cultivates Questioning and Reasoning culture among the students.

M2: Creating collaborative learning environment that ignites the critical thinking in students and leading to the innovation.

M3: Establishing Industry-Institute relationship to bridge the skill gap and make them industry ready and relevant.

M4: Mentoring students to be socially responsible by inculcating ethical and moral values.

Program Educational Objectives (PEOs)

PEO1 - To apply skills acquired in the discipline of Computer Science and Engineering for solving societal and industrial problems with apt technology intervention.

PEO2 - To continue their career in industry/academia or to pursue higher studies and research.

PEO3 - To become successful entrepreneurs, innovators to design and develop software products and services that meets the societal, technical and business challenges.

PEO4 - To work in the diversified environment by acquiring leadership qualities with effective communication skills accompanied by professional and ethical values.

Program Specific Outcomes (PSOs)

PSO1 - Analyze and develop solutions for problems that are complex in nature by applying the knowledge acquired from the core subjects of this program.

PSO2 - Ability to develop Secure, Scalable, Resilient and distributed applications for industry and societal requirements.

PSO3 - Ability to learn and apply the concepts and construct of emerging technologies like Artificial Intelligence, Machine learning, Deep learning, Big Data Analytics, IoT, Cloud Computing, etc for any real time problems.

From the Editorial Desk...

Greetings!

We are thrilled to bring you the latest edition of the Department of CSE Newsletter. This publication is a celebration of the talent, hard work, and accomplishments of our students and faculty, showcasing their dedication to excellence both inside and outside the classroom.

The newsletter provides a platform to reflect on the various initiatives and events that have enriched our department over the past year. From faculty development programs to student-driven activities, every achievement highlights the enthusiasm and commitment that defines our community. It is our aim to share these milestones with you and inspire others to pursue similar excellence in their endeavors.

This edition serves not only as a chronicle of our department's journey but also as a testament to the collaborative spirit that drives us forward. We are proud to shine a spotlight on the diverse talents and efforts of our students and staff, whose contributions have set new benchmarks for academic and extracurricular achievements.

We warmly invite you to share your valuable feedback, comments, and suggestions to help us improve and elevate the quality of this newsletter in the future. Your insights are essential to making this publication a true reflection of our collective aspirations and growth.

Thank you for taking the time to engage with this newsletter. We hope it motivates you to strive for greater accomplishments and be a part of the exciting journey that lies ahead.

Sd/-

The Editorial



Message from the HOD's Desk

It gives me great pleasure to present the 2025 edition of the Department of Computer Science & Engineering newsletter, “Tech Messenger.” This publication reflects the innovation, achievements, and collaborative spirit that define our department.

Through our “Strong Alumni and Industry Connect” initiative, we strive to make our students industry-ready through hackathons, coding challenges, real-time projects, and awareness programs. Faculty members are equally encouraged to pursue impactful research in a supportive environment. Our forum, “UniCS,” continues to nurture and showcase the talents of our students.

This year, we organized a range of events, including technical talks, alumni sessions, workshops, and FDPs, in collaboration with industry experts and alumni. These activities bridge the gap between academics and industry while fostering professional growth.

I congratulate the editorial team for their exceptional effort in compiling this newsletter, highlighting our department’s journey from July to December 2025. Wishing them continued success in future editions.

Dr. Nirmala C.R.
Dean of Placements
Professor & Head
Department of Computer Science & Engineering

Advisory Board:

- Prof. Y. Vrushabhendarappa –
Director, BIET
- Dr. Aravind H. B.
– Principal, BIET
- Dr. Nirmala C. R.
– Dean of Placements
Professor and Head,
Department of CSE

Chief Editors:

- Prof. Waseem Khan,
Assistant Professor
- Prof. Gangamma Hediylad,
Assistant Professor

Associate Editors:

- Dhyaan J N
- Dhruva N R

FDP/WORKSHOP ATTENDED

- Dr. Gururaj T, Raghu B. R, Chandrashekhar M. V, and Siddesh A. S attended a 6-day FDP on “**AI and Data Analytics for Sustainable Development Goals**” organized by RNS Institute of Technology from 18th August to 23rd August 2025.
- Dr. Gururaj T and Vinayak P attended a 6-day FDP on “**Parallel Computing**” organized by RV Institute of Technology and Management from 22nd July to 27th July 2025.
- Dr. Santosh K. C and Jagadesh A. N attended a 12-day FDP on “**AI in Medical Imaging and Diagnostics: Current Trends and Challenges**” organized by Electronics and ICT Academy in association with IIT Guwahati from 7th July to 18th July 2025.
- Dr. Naresh Patel K. M, Dr. Gangadharappa S, Rahima B, Madhu N. H, Archana T. C, and Rachana G. S attended a 5-day FDP on “**Trends & Scope in Electric Vehicle**” organized by Electronics and ICT Academy in association with IIT Guwahati from 30th June to 4th July 2025.
- Jagadesh A. N and Anu C. S attended a 6-day FDP on “**Role of AI in Medical Image Processing**” organized by Rajeev Institute of Technology from 14th July to 19th July 2025.
- Dr. Nirmala C. R, Dr. Gururaj T, Dr. Santosh K. C, Jagadesh A. N, Vishwanath V. K, Rachana G. Sunkad, Arjun H, Ranjitha H. S, Vinayak P, and Anusha A attended a 5-day FDP on “**Parallel Computing**” organized by ICT Academy in association with IIT Guwahati from 8th September to 12th September 2025.
- Nomitha Chawla attended a 1-day webinar on “**Artificial Superintelligence (ASI)**” organized by Yenepoya Institute of Technology on 4th September 2025.
- Jagadesh A. N attended a 19-day Training Program on “**Database Solution Expert**” under Talent Next (WIPRO Certified FDP) organized by Wipro from 10th November to 28th November 2025.

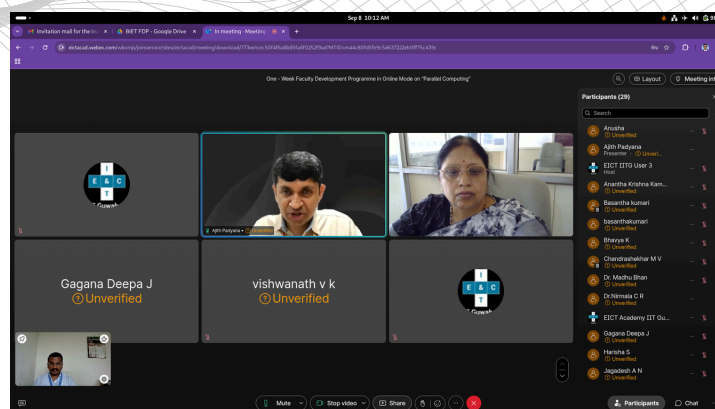
EVENTS ORGANIZED IN THE DEPARTMENT

- The CSE Department organized **Faculty Conclave 2.0** from **7th to 12th July 2025** under the theme “**Let’s Work and Think Together.**” The conclave emphasized teamwork, innovation, and continuous growth to strengthen teaching, research, and overall institutional development.



Glimpses of the event

- A **5-day Faculty Development Programme on Parallel Computing**, organized in association with **IIT Guwahati**, was conducted online from **8th to 12th September 2025**. Around 40 faculty members from various institutions participated in the programme



Glimpses of the event

- All faculty members attended the **FDP on “AI for Future Workforce”** organized by the **Software Technology Parks of India (STPI)** in association with **Vision Davangere and BIET on 15th October 2025**. Mr. Sasikumar V, Additional Director and Centre In-Charge, STPI Hubballi & Davanagere, graced the inaugural session as the Chief Guest, and the hands-on technical sessions were conducted by Ms. Ambika Saxena, Program Manager – Intel Digital Readiness Programs.



Glimpses of the event

- A 5-day Faculty Development Programme on **Cyber Security** was conducted from **15th to 19th December 2025**, with 64 participants, including 22 faculty members from different institutions.



Glimpse of the event

- Dr. Nirmala C R delivered insightful sessions on **Engineering Education** for PU students, covering engineering disciplines, career opportunities, and emerging technologies, while highlighting BIET's academic environment, infrastructure, achievements, and student-centric initiatives. The sessions were conducted for Mahesh PU College (15th November 2025, 250 students), Team Academy PU College (27th November 2025, 800 students), and Siddaganga PU College (10th December 2025, around 800 students) with the support of faculty members Rachana G S, Nomitha C, Vinutha K P, and Nandini B.



Glimpses of the event

STUDENTS ACTIVITIES/PROGRAMS ORGANIZED

- The Department of CSE, under UniCS – Binary Blooms (CSE Coding Club), in association with the New Age Incubation Network (NAIN), organized a **Bootcamp and Hackathon on “Agentic AI and Generative AI”** for 5th semester CSE students on **4th and 5th August 2025**. The sessions were conducted by **Ms. Usha Rengaraju**, Chief Data Scientist, Corporate Trainer, and Founder of NeuroAI, and coordinated by **Dr. Naseer R**, **Dr. Abdul Razak M S**, **Waseem Khan**, and **Rachana G Sunkad**.



Glimpses of the event

- A 12-Hour Hackathon on “Agentic AI and Generative AI” was conducted for 5th semester CSE students on **6th August 2025** from 8:00 AM to 8:00 PM. **Nachiketh V S & Team** secured 1st place, **Dhyaan J N & Team** won 2nd place, and **Manasa H & Team** achieved 3rd place.



Glimpses of the event

- The **CognitiveX – GenAI Hackathon** was held on 13th and 14th August 2025 at BIET, Davangere, organized at the institute level under the Bapuji Educational Association. Mr. Akshay Kumar Kothuri, Manager – Academic Relations, SmartBridge Education Services Pvt. Ltd., graced the event as the Guest of Honor. Shruti S R & Team (EEE) secured 1st place, Adrash Kumar & Team (CSE) won 2nd place, and Sanjana N (CSE) achieved 3rd place, coordinated by Dr. Naseer R, Hackathon Club Coordinator.



Glimpse of the event

- In association with **Tri-Pillar Solutions**, the Department of CSE organized a **Skill Development Program on Full Stack Development** using Java from 18th to 29th August 2025 for 5th semester students. The sessions were conducted by Mr. Saurav Jyothi Sarkar, Mr. Raushan Kumar Baitha, Mr. Nirmal Shekhar, and Mr. Jagdish Kumar V from Tri-Pillar Solutions, and coordinated by Dr. Anusha R and Arjun H.



Glimpses of the event

- The Department of CSE, in association with **MongoDB**, organized a workshop on **“Store Smarter, Query Faster: The MongoDB Way”** for 7th semester students on **22nd and 23rd August 2025**. The sessions were conducted by Mr. Darshan Jayarama, Senior Technical Service Engineer at MongoDB, and coordinated by Dr. Abdul Razak M S and Dr. Anusha R.



Glimpses of the event

- The Department of CSE organized an **In-house Internship on Aptitude Training Programme** for 3rd semester students from **1st to 13th September 2025** in association with **QSpiders, Bengaluru**, coordinated by Dr. Gururaj T and team.



Glimpses of the event

- As part of a gap-filling initiative for the 7th-semester course **Internet of Things**, the Department organized a **Student Enablement Event** titled “**Building Projects with Raspberry Pi**” on **September 17, 2025**. The session provided hands-on exposure to Raspberry Pi and its applications in IoT, enriching students’ practical understanding of emerging technologies. The event was conducted by Mr. Chidambar Kulkarni, Zonal Head, and Mr. Nandish, Head R&D Engineer, AES Solutions, Bangalore.



Glimpses of the event

- The Department of CSE organized a **CSR initiative** sponsored by the **Infosys Foundation**, in association with the **ICT Academy**, providing training on “**Python Web Developer**” from **1st to 18th September 2025** in offline mode. A total of 65 final-year students from various core branches participated, including 20 from CSE, 15 from ISE, 10 from ECE, and 20 from CSE allied branches. The event was coordinated by Dr. Usha G R (SPOC).



Glimpses of the event

- The Department organized an **Orientation Event** for first-year students on **September 19, 2025**. The event was graced by distinguished Chief Guests Mr. Hanumanth Budihal (2016 alumnus, Founder & CEO, LogicBrackets, Bengaluru) and Dr. Manoj Kumar M V (2012 alumnus, Professor, Dept. of IS&E, Nitte Meenakshi Institute of Technology, Bengaluru). The key highlight of the event was the inspiring interaction by the alumni, who shared their experiences and motivated students towards learning, personal growth, and exploring future career opportunities



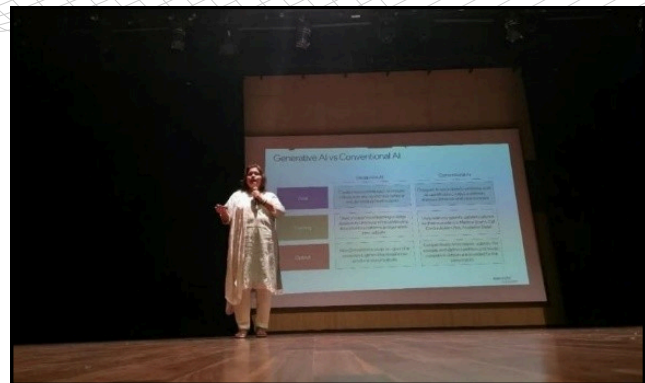
Glimpses of the event

- The Department organized the **Forum Inauguration & Fresher's Party** for third-semester students on **September 25, 2025**, under the vibrant theme “**NAVRANGA – Ignite Your New Beginning.**” The event marked a significant beginning for students, fostering enthusiasm, interaction, and a sense of belonging among the new batch



Glimpses of the event

- All 5th-semester students actively participated in the **Student Development Event** on “**AI for Future Workforce,**” held on **October 16, 2025**. The event was organized by the **Software Technology Parks of India (STPI)** in association with **Vision Davangere** and **BIET**. A key highlight of the event was the participation of over 1000 students from various institutions, including **BIET, UBDTCE, GMIT, JIT, and SS CARE Trust**. The session was led by **Ms. Ambika Saxena, Program Manager – Intel Digital Readiness Programs**, who provided valuable insights into the role of **AI** in shaping future careers and workforce readiness



Glimpses of the event

- The UniCS Cultural Club of the Department organized a vibrant **jamming session** titled “**SAMAGANA 1.0**” on **October 17, 2025**. The event served as a creative platform for students to showcase their musical talents, fostering enthusiasm, collaboration, and cultural engagement



Glimpses of the event

- The Department, under **UniCS – Binary Blooms Coding Club**, organized “**Code Quest 2.0**,” an inter-collegiate coding competition on **October 30, 2025**. The event provided a dynamic platform for students from the institute and other colleges to showcase their programming skills, creativity, and technical expertise.



Glimpse of the event

- The Department organized a two-day workshop on “**Hybrid Application Development using Flutter and Dart**” for 5th-semester students on **November 13 and 14, 2025**. The workshop focused on enhancing students’ technical competencies and bridging the gap between academic learning and industry practices. The sessions were conducted by Dr. Manoj Kumar M V, Professor and Deputy Head, and Prof. Prashanth B. S, Assistant Professor, Department of ISE, Nitte Meenakshi Institute of Technology (NMIT), Bengaluru.



Glimpses of the event

- The Department organized a “**Hedera Developer Program**” workshop on **November 24 and 25, 2025**, at the institute level for all 5th-semester students. The workshop focused on blockchain development and emerging technologies, providing valuable industry-oriented insights. The sessions were delivered by Ms. Nikita Kotme, Content Strategist & Blockchain Trainer, and Ms. Nikita Gugale, Software Engineer and Developer Trainer – Blockchain, who enriched students with practical knowledge and expertise in the domain



Glimpses of the event

- The Department conducted “**OPTICODE**,” a coding challenge on **November 26, 2025**, for students across all CS-allied branches of BIET. The event aimed at enhancing students’ problem-solving skills and coding proficiency, fostering a competitive and intellectually stimulating environment.



Glimpses of the event

- In association with the **BIET Sports Club**, the Department organized the inauguration of the Annual Sports Event “**BIET Athletic Meet**” for students on December 4, 2025. The event promoted sportsmanship, teamwork, and physical well-being among students. The department-level prize distribution ceremony for the winners was held on December 10, 2025, recognizing and celebrating their achievements.



Glimpses of the event

STUDENTS ACHIEVEMENTS

- 5th semester students Nachiketh V S, Harshith H R, Indudhar H, Amith P secured first place in the Hackathon on **Agentic AI and Generative AI**, organized by the Department of CSE in association with NAIN, held on 6th August 2025 at BIET, Davanagere. Dhyaan J N, Prajwal P Raikar, Prajwal S Patel, and Prajwal L Bhat secured second place, while Manasa H and Pallavi R achieved third place. The students have been recognized for their performance and are being encouraged to participate in various hackathons and technical activities.



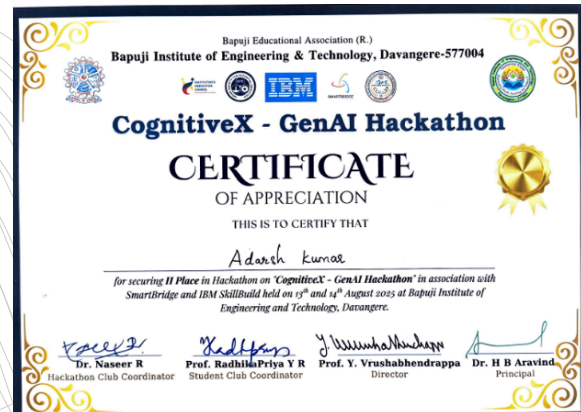
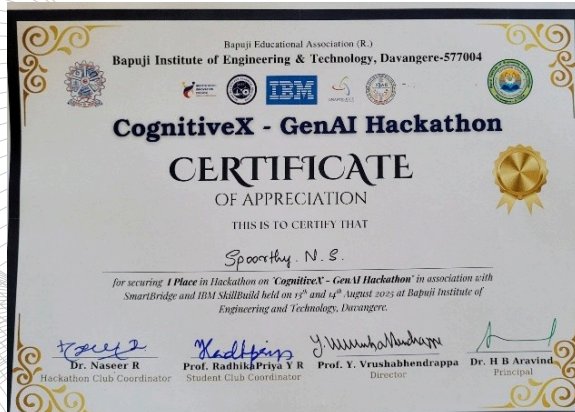
Glimpses of the achievements

- 5th semester students Prajwal M H, Prajwal P Raikar, Raghavendra H, Sanjay H M, and Srujan H S successfully completed the **MongoDB Associate Developer course** and appeared for the proctored examination on 11th August 2025



Glimpses of the achievements

- The department actively identifies and encourages bright students to participate in technical events at the national and international levels. As a testament to this initiative, Nachiketh V S (5th semester) and Spoorthi N Swamy (7th semester) secured first place in the **CognitiveX – GenAI Hackathon**, organized in association with **SmartBridge** and **IBM SkillBuild**, held on 13th and 14th August 2025 at BIET, Davanagere. Umme Kulsum (7th semester) and Adarsh Kumar (7th semester) secured second place, while Jeevitha D (7th semester) achieved third place.



Glimpses of the achievements

- Presidency University Bengaluru** hosted **NEXO VATE'25**, a 24-hour National Level Hackathon held from 29th to 30th August 2025, aimed at empowering students to develop innovative solutions to real-world problems. Nachiketh V S and a team of 5th semester students secured First Place, winning a cash prize of ₹50,000, marking an outstanding achievement in this prestigious competition.



Glimpses of the achievements

- **The Smart India Hackathon (SIH) 2025 – Internal Hackathon** was conducted at the institute level on **September 19, 2025**. During the event, **30 teams from the CSE department** presented their innovative ideas before a panel of evaluators.



Glimpse of the event

- The Department celebrated the **43rd Graduation Day** on **September 27, 2025**, honoring the **graduating class of 2025**. The event marked a significant milestone, celebrating students' achievements and their successful transition into professional careers and higher studies



Glimpse of the event

- As an encouragement to bright students, 5th-semester student V S Nachiketh and team secured Second Place in “**Hack Fusion 1.0**,” a National Level Hackathon organized by the **Maharaja Institute of Technology, Mysore**, held on **September 27 and 28, 2025**. The achievement highlights the students’ innovation, teamwork, and technical excellence at a national platform



Glimpses of the achievements

- As an encouragement to bright students, Sanju K P and team (5th semester) secured Second Place in the **12-hour WIE IEEE 2K25 Hackathon**, held on **December 8, 2025**, at **Siddaganga Institute of Technology, Tumakuru**. The team was recognized for developing an innovative AR-based Indian Sign Language learning solution, showcasing their creativity, social impact, and technical excellence



Glimpses of the achievements

- As an encouragement to bright students, 5th-semester student Prajwal P. Raikar and team secured First Place at “**INFOTHON 5.0**,” a **24-hour National Level Hackathon** organized by the **Department of Information Science and Engineering, Vidyavardhaka College of Engineering, Mysuru**, held on **October 11 and 12, 2025**. The achievement reflects their innovation, technical expertise, and teamwork at a prestigious national platform



Glimpses of the achievements

PLACEMENT ACTIVITIES

- The Training & Placement Cell organized a **Technical Talk** titled “**Generative AI meets Agentic AI: New Frontiers in Innovation**” for the 2027 graduating batch students on 19th August 2025. The session was delivered by **Mr. Veeresh Belludi** (AI & SAP Evangelist, CEO at Infosight Consulting and Infosight AI) and provided valuable insights into the evolving fields of Generative AI and Agentic AI, benefiting the students



Glimpses of the event

- In association with the T&P Department, a **Pre-Placement Talk** was organized by the **Cognizant team** on **29th July 2025** for 7th semester students. **Srikanth Madduri (Director)**, **Sudarshini Puttappa (Senior Manager – HR)**, and **Krishna Priya (Associate – HR)** served as the resource persons for the session



Glimpses of the event

- In association with **Talent Battle**, the **Training & Placement Cell** organized the **second session of placement training** for 7th semester students from **28th July to 2nd August 2025**.



Glimpses of the event

- In association with the **Training & Placement Cell**, **Toshiba** and **In4Growth Global** conducted **Pre-Placement Talks** on **1st and 4th September 2025**.



Glimpses of the event

- In association with the **Training & Placement Cell**, **IBM** conducted a **Pre-Placement Talk** in online mode on **29th August 2025**. The session provided valuable insights into the recruitment process, company culture, and career opportunities at IBM, with all final-year students actively participating.



Glimpses of the event

- In association with the **Training & Placement Cell**, the Department organized **Pre-Placement Talks** to prepare students for career opportunities. **Ivoyant** conducted a session on **September 11, 2025**, followed by a **Mu-Sigma Pre-Placement Talk** on **December 8, 2025**.



Glimpses of the event

- The **Training & Placement Cell** organized an **Outreach Session on GATE and JAM examinations for final-year and pre-final-year students on September 12, 2025**. The session highlighted higher education opportunities and career prospects, featuring distinguished alumni and scholars **Mr. Prashanth P** and **Mr. Shivakumar V** from **IISc Bangalore**, who shared their experiences and valuable guidance



Glimpses of the event

- The **Training & Placement Cell** organized an **Orientation Session for pre-final year students (2027 Batch) on October 31, 2025**. The session was conducted by **Mr. Shivaprasad, Director – Fresher Profiles**, with the objective of guiding students on the effective usage of the Fresher Profiles platform and enhancing their preparedness for placement opportunities.



Glimpses of the event

- The **Training & Placement Cell** organized a **Pre-Placement Talk** by **Tata Consultancy Services (TCS)** for the **2026 batch** students on **November 5, 2025**. The session provided valuable insights into recruitment processes and career opportunities at TCS. The resource persons included **Mr. Rajesh Kumar Sakri Vijay, Segment Head (Europe & UK)**, **Mr. Arun Bhandarkar, Head – Human Resources (Europe)**, and **Mr. Saivenkat V, HR – Campus Recruiter, Talent Acquisition Group**, who guided students on industry expectations and career pathways



Glimpses of the event

PAPER PRESENTED /PUBLISHED by faculty

- **Prof. Anu C. S and Dr. Nirmala C. R** published a paper titled **“Performance Assessment of Various Ensemble Learning Models for Crop Yield Forecasting”** in the **Karbala International Journal of Modern Science (Q2, Scopus)** in **2025**.
- **Prof. Anu C. S and Dr. Nirmala C. R** published a paper titled **“Outlier Detection and Removal in Crop Yield Prediction”** in the **Scientific World Journal (Q2, Scopus)** in **2025**.
- **Dr. Usha G. R** published **“Blog Classification on Twitter Dataset Using Weighted Embedding Technique with ARSO-based LSTM Model”** in the **Journal of Information Systems Engineering and Management (Q3 Scopus)** in **2025**.
- **Prof. Vishwanath V. K** published **“Federated Deep Reinforcement Learning with Knowledge Distillation for QoE-aware Task Offloading in Containerized MEC”** in **Discover Artificial Intelligence (Q1 Springer)** in **2025**.
- **Dr. Gururaj T** published **“Automated Infection Detection in Diabetic Foot Ulcer Images Using CNN and ELM Models”** in **IEEE GITCON 2025**.
- **Prof. Shankar Sarji P** published **“A Review on Deep Learning-Based Detection of Malaria from Blood Smear Images”** in **Q2 Scopus Journal** in **2025**.
- **Prof. Waseem Khan, Dr. M. S. Abdul Razak, M. V. Manoj Kumar, and Dr. Naseer R** published a paper titled **“A Comprehensive Survey on Cognitive Cyber Security Analysis Using Machine Learning Approaches”** in the journal **IEEE Access (Volume 13)** in **2025**.
- **Prof. Gangamma Hediyaalad** published a paper titled **“Synthesizing Strategies and Innovations in Combating Land Degradation: A Global Perspective on Sustainability and Resilience”** in the **IAES International Journal of Artificial Intelligence (Q2 Scopus)** in **2025**.
- **Dr. Anusha R** published a paper titled **“GaitStruct: Enhanced Human Recognition Through Edge Structure Detection in Visual Gait Analysis”** in the **IEEE International Conference on Recent Advances in Computing and Systems (ReACS 2025)** held at **IIIT Gwalior** on **15th September 2025**, which is indexed in **Scopus**.

- **Dr. Anusha R** published a paper titled “**Integrated Design and Control Implementations of a Robotic Mechanism for Automated Solar Panel Cleaning**” in the **IEEE International Conference on Power, Energy and Innovations (ICPEI 2025)** held at Pattaya City on **6th November 2025**, which is indexed in **Scopus**.
- **Dr. Anusha R** published a paper titled “**A Multi-Scale Deep Learning Approach for Nutrient Deficiency Detection in Banana Plants Using Adaptive Feature Pooling**” in the **Journal of Neural Computing and Applications (Q1 Journal, Springer)** on **1st December 2025**, which is indexed in **Scopus**.
- **Prof. Raghu B. R** published a paper titled “**Integrating CNN-LSTM and Hybrid Machine Learning for Lung Cancer Prediction based on Air Quality**” in the **International Conference on Computing Methodologies and Communication (ICCMC 2025)** on **5th November 2025**, which is indexed in **Scopus**.

PLACEMENT DETAILS

Sl.No	Industry Name	No.of students placed
1	Cognizant GenC	16
2	LearnFlu	06
3	Infosys	04
4	Heartiest Mind	04
5	Logic Brackets	03
6	Cleo	03
7	iNube	03
8	iVoyant	02
9	Toshiba	02
10	IBM	02
11	Cognizant GenC Next	02
12	Coditas	01

Sl.No	Industry Name	No.of students placed
13	QSpiders (CSR)	22
14	Pentagone Space (CSR)	13
15	X-Workz (CSR)	10
16	TAP Academy (CSR)	08
17	Dhee Coding Lab (CSR)	07
18	Dextris (CSR)	02
19	Logic Brackets	04
	Industries Contacted for Placements	27
	Total No. of Students Placed	91
	No. of Students with Multiple Offers	18
	CSR HeadCount	66

UNIVERSITY WORK carried by Faculty

- **Dr. Nirmala C R** has been nominated as **BOE Chairman** by **VTU** for the **academic year 2024-2025**.
- **Prof. Raghu B.R, Dr. Naresh Patel K M, Dr. Naveen H M, Dr. Santosh K C, Dr. Gangadharappa S** appointed as **valuator for UG answer scripts and examiner for UG practical examination**.
- **Prof. Waseem Khan, Prof. A N Jagadish, Prof. Preethi B, Prof. Gangamma Hediylad, Prof. Anu C S** appointed as **examiner for UG practical examination and UG answer scripts**.

Faculty Corner

Dr. Anu C S

Assistant Professor

CS & E Dept. BIET, Davangere-04



MigrAid

Multilingual AI Companion for Rural-to-Urban Migrants Navigating City Services

MigrAid is an offline-capable, voice-first AI companion designed specifically for rural-to-urban migrants who arrive in Indian cities with little knowledge of local systems, limited literacy, and no reliable internet access. The app runs a lightweight Small Language Model (SLM) directly on the user's phone — meaning it works entirely without a data connection — and communicates in the user's native language, whether that's Kannada, Bhojpuri, Telugu, or any of India's major regional tongues.

Through simple voice conversations, MigrAid guides a newly arrived migrant through the overwhelming tangle of city life: how to register for a ration card, where the nearest government shelter or labour office is, which bus to take, and what their legal rights are as an unorganized worker. The app asks gentle clarifying questions and adapts its explanations to the user's literacy level, making bureaucratic systems accessible to people who have never used a smartphone beyond making calls.

Problem Addressed

Rural-to-urban migrants in India lack institutional support when navigating city services, government schemes, and legal rights — especially with limited literacy and no internet access.

Proposed Solution

An offline-first, voice-driven AI app powered by a Small Language Model (SLM) running on-device — no internet required — communicating in regional languages to guide migrants through city life.

Key Features

 City Navigation Locates nearest government offices, shelters, bus routes, and health centres using voice.	 Scheme Finder Proactively alerts migrants to PM Awas Yojana, BOCW registration & other eligible benefits.	 Legal Rights Explains worker rights, tenancy laws, and labour protections in simple regional language.
 Family Connect Sends voice-recorded messages back home without needing to type or use WhatsApp.	 Contract Help Reads and explains work contracts in plain language before the user signs anything.	 Adaptive AI Remembers user context across sessions and adjusts to literacy level automatically.

Application Overview

Beyond navigation, MigrAid acts as a persistent personal advocate — it remembers the user's situation across sessions (stored locally and privately) and proactively alerts them to relevant government schemes they may qualify for, such as PM Awas Yojana housing benefits or BOCW welfare board registration. It can also help a migrant send voice-recorded messages back to family in the village, understand a work contract before signing it, or locate a nearby community health centre when sick.

The project directly addresses one of India's most acute social pain points: every year, tens of millions of people make the rural-to-urban leap into cities like Bengaluru, Mumbai, and Delhi, and the vast majority land with zero institutional support. MigrAid turns a basic Android phone into a knowledgeable, patient, always-available guide — the kind of help that today only exists if you happen to know the right person.

Technology Stack	
AI Engine	Small Language Model (SLM) — Phi-4 Mini / Llama 3.2 (1–3B params)
Inference	Fully on-device — zero cloud dependency, works offline
Languages	Kannada, Hindi, Bhojpuri, Telugu + other regional languages
Interface	Voice-first UI with Text-to-Speech & Speech-to-Text
Platform	Android (Flutter) — targets low-cost smartphones
Data Privacy	All user data stored locally on device — never shared

Social Impact at a Glance

450M+ Internal migrants in India	0 Internet needed to run MigrAid	20+ Regional languages supported
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Project Objectives

- Provide an offline-first AI assistant that operates entirely on the device without needing internet connectivity.
- Support 20+ Indian regional languages through voice-to-text and text-to-speech pipelines.
- Guide migrants through government scheme registration, ration cards, housing, and legal rights.
- Adapt dynamically to the user's literacy level, using simpler language and shorter sentences when needed.
- Store all personal context locally on the device to ensure full privacy and data sovereignty.
- Reduce dependency on literacy by making the entire interface operable through voice alone.

Conclusion

MigrAid represents a meaningful convergence of cutting-edge AI technology and deep social responsibility. By deploying Small Language Models on-device in regional languages, it breaks through the twin barriers of connectivity and literacy that have long excluded India's most vulnerable urban newcomers from the digital ecosystem. The application is not merely a navigation tool — it is a digital safety net for tens of millions of people who arrive in cities every year carrying only hope and a basic Android phone. MigrAid gives them a knowledgeable, patient, and private companion on their journey.

Student Corner

Amogha M Koulapure
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Explainable AI (XAI): Building Trust in Intelligent Systems

Artificial Intelligence is increasingly making decisions that influence our daily lives, from recommending content and detecting fraud to assisting doctors in diagnosing diseases. However, many advanced AI models function as "black boxes," producing accurate predictions without explaining how they arrived at them. This has led to the emergence of Explainable Artificial Intelligence (XAI), a field focused on making AI systems transparent, understandable, and trustworthy.

Explainable AI enables developers and users to understand the reasoning behind an AI's decisions. Instead of simply providing an output, XAI highlights the factors that influenced the result, making it easier to verify predictions, detect biases, and identify errors. This is especially important in critical sectors such as healthcare, finance, law, and autonomous vehicles, where AI-driven decisions can have significant consequences.

As AI becomes more powerful, transparency is becoming just as important as accuracy. Governments and organizations worldwide are emphasizing responsible AI practices, encouraging the development of systems that are fair, accountable, and explainable. While creating interpretable AI models without compromising performance remains a challenge, ongoing research is making significant progress in balancing both objectives.

For future software engineers, Explainable AI is more than a technical concept, it is a responsibility. Building AI systems that people can understand and trust will be essential for the next generation of intelligent applications. In the future, the most successful AI solutions will not only deliver accurate results but also clearly explain why those results can be trusted.

Threads of Friendship

In crowded halls where footsteps blend,
We found a stranger, then a friend.
A smile became a steady light,
That guided us through day and night.

We shared our dreams, our fears, our cheer,
And found a family growing near.
Through every test and every climb,
We stood as one, defying time.

Though years may lead our paths apart,
The memories stay within the heart.
For friendships born in college days
Will light our lives in countless ways.

Moksha Kumar
4BD22CS100
7th Semester

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ಬೆಟ್ಟದ ಉಸಿರಲಿ ಮೋಡದ ನೆರಳು,
ನದಿಯ ನಗುವಲಿ ಬದುಕಿನ ಬೆಳಕು.

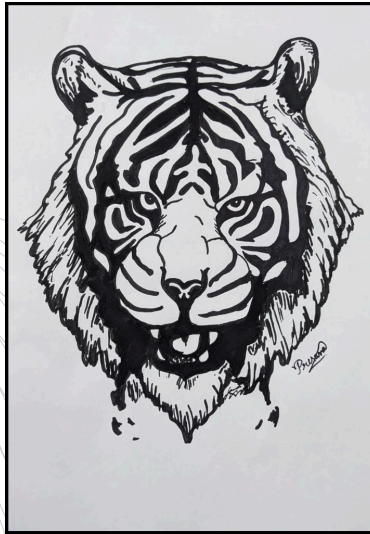
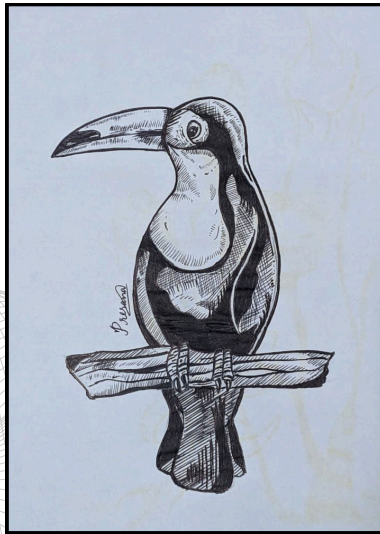
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ಪಯಣವೇ ಕಲಿಸುವ ಬದುಕಿನ ಫಲ.

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ನಡೆದ ದಾರಿಯೇ ಉಳಿಯುವುದು ಕಾಯ.
ಲೋಕವ ಸುತ್ತಿದ ಮನ ಅರಿಯುವುದು—
ಪಯಣವೇ ಜೀವನ, ಬದುಕೇ ಪಯಣವು.

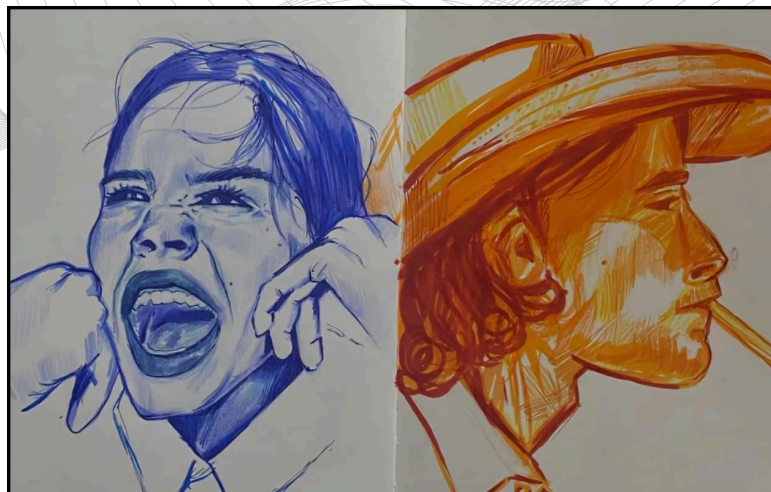


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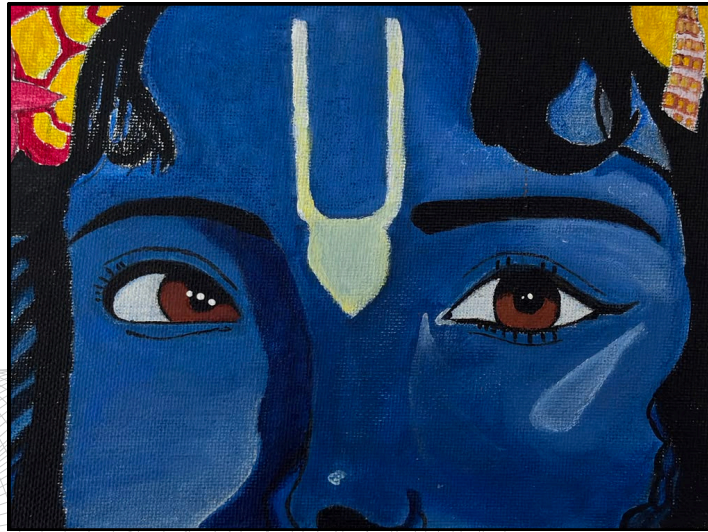
Art Gallery



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