

Department of
Computer Science & Engineering



BITS
AND
BYTES

N
E
W
S
L
E
T
T
E
R



Volume 9
JAN-JUN 2024

Our Patrons



Dr. A. J. Shetty
President, LMET



Mr. Prashanth Shetty
Vice-President, LMET



Dr. Shantharama Rai C.
Principal, AJIET

Vision of Institute

To produce top-quality engineers who are groomed for attaining excellence in their profession and competitive enough to help in the growth of nation and global society.

Mission of Institute

- To offer affordable high-quality graduate program in engineering with value education and make the students socially responsible.
- To support and enhance the institutional environment to attain research excellence in both faculty and students and to inspire them to push the boundaries of knowledge and base.
- To identify the common areas of interest amongst the individuals for effective industry-institute partnership in a sustainable way by systematically working together.
- To promote the entrepreneurial attitude and inculcate innovative ideas among the engineering professionals.

HOD's Message



Dr Antony PJ

It is with immense pleasure that I announce the release of the volume 9 of our department newsletter, "Bits & Bites." This milestone reflects the collective dedication and hard work of many individuals. I would like to extend my heartfelt appreciation to several key contributors who have made this publishing of this newsletter possible. A special thank you goes to our management and the Laxmi Memorial Educational Trust (R.) for providing the excellent facilities and unwavering support that have made this achievement possible. As we navigate the ever-evolving landscape of the IT field, our goal is to cultivate critical thinkers and adept problem-solvers among our students, preparing them for future excellence. Thank you once again to everyone involved. I wish you all continued success and look forward to the exciting developments ahead.

Vision of Department

To adapt the evolutionary changes in computer science and expose the students to the cutting-edge technologies to produce globally competent professionals.

Mission of Department

1. To ensure holistic professional education in the field of Computer Science & Engineering and produce efficient industry ready IT graduates capable of solving societal problems to be a part of national building.
2. To provide an inspirational atmosphere in the department to nurture research and innovation capabilities among the students and faculties making them good innovators and visionaries.
3. To establish a vibrant Industry – Academic relationships and collaborations among the individuals having the opportunities to work on the latest technologies and professional challenges with integrity.
4. To cultivate students with professional skills, foster innovative research endeavors and cultivate entrepreneurial capabilities.

Editorial Board



Dr Antony PJ
Chairman



Mrs. Sharon C Dsouza
Chief Editor



Mr. Akshay
Kumar



Ms. Meghana
Kotiyan

Program Specific Outcomes(PSOs)

At the end of the program, graduates will be able to

PSO1

Apply engineering principles, professional ethics and fundamental science in designing systems and communication models (protocols).

PSO2

Design and develop smart and intelligent based applications in computational environment.

Program Educational Objectives (PEOs)

PEO1

To develop in students, the ability to solve real life problems by applying fundamental science and elementary strengths of computer science courses.

PEO2

To mold students, to have a successful career in the IT industry where graduates will be able to design and implement the needs of society and nation.

PEO3

To transform students, to excel in a competitive world through higher education and indulge in research through continuous learning process.

Program Outcomes (POs)

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 and 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.
- Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 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 and 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 life-long learning in the broadest context of technological change.

Gems Who Made Us Proud

Company	Name
UniCourt	Sharath Kumar
	Shreya S Shetty
	Abhilash JY
	Thejaswi DS
	Yahshas Manjar
MU Sigma	Abhilash JY
	Prathvi Devadiga
	Ashwin Shetty
Glow Touch	Alisha Ujwala
	Anvitha
	Prakruthi Shetty
	Vaishishta
Novigo	S Athreya Shankar
	Dhruv Kishor Shetty

Gems Who Made Us Proud

Company	Name
Quick Matrix	Rahul M Moolya
	Prajna P
	Swasthik Achar
Palle Technologies	Namratha Shetty
	Ananya G Adyanthaya
Pentagon Space	Cliva Rhea Moras
Streebo	Deviprasad Rai P
Jaro Education	Isha Sheikh Bashir
Zell Education	Ramsha Riyaz
Edvetha	Thikesh Raj
Excelr	Mouna R R
Parrophins	C A Prajwal
QSpider	Ramya
Juego Studio	Nishanth

Workshops

Building Robust Web Apps: A Comprehensive MERN Workshop

The Department of Computer Science and Engineering held a three-day workshop on "Building Robust Web Apps: A Comprehensive MERN Workshop" from May 27-29, 2024, led by Mr. Mehboob Khan from Taniya Technologies, Mangalore. This workshop was for 6th semester CSE students as part of their course IPCC: 21CS62. The event began with a prayer and lamp lighting. Mrs. Snitha Shetty introduced the resource person, followed by addresses from Principal Dr. Shantharama Rai C, Dean Dr. P. Mahabaleswarappa, and the Vice Principal and HoD of CSE, who all emphasized the importance of learning beyond the syllabus. The session ended with a vote of thanks from Mrs. Sharon C. Dsouza.



Workshop on “Mobile Application Development using Android Studio”

The Department of Computer Science and Engineering organized a two-day workshop on "Mobile Application Development using Android Studio" on June 7-8, 2024. Mrs. Usha CS, Assistant Professor from AJIET, Mangaluru, led the sessions from 9:00 AM to 4:55 PM, aimed at 4th semester CSE students. The event began with a prayer song and lamp lighting. Mrs. Shilpa Shetty A welcomed the participants and introduced the resource person. Dean of Academics Dr. P. Mahabaleswarappa emphasized the importance of learning beyond the syllabus. The Vice Principal and HoD of CSE encouraged students to pursue certification courses and workshops for better placement opportunities.



Workshops

Workshop on “FLUTTER”

The Department of Computer Science and Engineering at AJIET, Mangalore, organized a Flutter workshop on June 8, 2024, from 9:00 AM in rooms A-324 and A-323. Ms. Khushi, a first-year CSE student, was the master of ceremonies. The event started with a prayer song by Ms. Janya and a welcome speech by Ms. Khushi. A ceremonial lamp lighting followed, symbolizing the spread of knowledge.

Dr. Antony P J, Vice-Principal and HOD of CSE, spoke on the importance of staying updated with technological advancements for better placements. Pre-final year students led the sessions:

Mr. Abhishek, Ms. Shradda, Ms. Nandana, Ms. Nishitha, Mr. Siddarth Nair, Mr. Arvind. Students learned about Flutter tools and gained skills to build simple applications, understanding the importance of the latest technology in various industries.



Workshop on AI- A New paradigm in Education and Research

A workshop on AI- A New paradigm in Education and Research was organized at AJ Institute of Dental Sciences for the PG students of various Nursing colleges on 2nd August 2024. The resource persons were Dr Chanchal Antony, Associate Professor and HOD, Department of AIML,

Mrs. Sharon D'Souza, Assistant Professor, Department of CSE and Mr. Stanley D'Souza, Assistant Professor Department of CSE. The workshop focused on applications of AI in health care sector.



Workshop on “Web Technology”



On May 25, 2024, at 10:00 AM, A J Institute of Engineering and Technology, Mangalore, hosted a workshop on web technology in L- A325. The event, led by Keerthana, a second-year CSE student, Assistant Professor in CSE, welcomed the attendees, followed by a lamp-lighting ceremony symbolizing knowledge and positivity. Dr. Antony P J, Vice- Principal and HOD of CSE, spoke on the importance of staying updated with technological advancements for better placement. Mr. Darshan Bandary, a pre-final-year student, conducted a hands-on session on web technology, while Mr. Kevin Samu covered CSS.

Workshop on UX design

On February 9, 2024, AJIET held a UX Design workshop in Seminar Hall-3 at 2:00 PM. The event, hosted by final-year CSE student Prakruthi Shetty, began with a prayer song and lamp-lighting ceremony. Mr. Stanley D'Souza, Assistant Professor, welcomed attendees. Dr. Mahabaleshwarappa P, Dean Academics, spoke on the importance of technological updates for placements. Mr. Vignesh Kamath, a UX Design professional, gave a keynote on user experience and design. He received a memento for his insights. The event concluded with thanks from the Department of Information Science students.



Industrial Visit

Industrial visit to Infosys Mysore Campus



The Students of 7th Semester CSE visited Infosys Training Campus in Mysore on 04-11-2023. A brief-versatile introduction about the Campus was given to the students, After the brief introduction, students visited Software Development Block (SDB) where the new software is developed and testing takes place. Then the students led to Special Economic Zone (SEZ) where the tax related activities takes place. The students also visited the massive Global Education Centre (GEC-1)

Technical Talks

Technical Talk on AI-ML and Robotics



A technical talk on Artificial Intelligence and Robotics was held aAtal Tinkering Lab of SDPT PU College Kateel on February 29, 2024. The workshop was conducted t the by Mrs. Snitha Shetty, Assistant Professor, from the Department of Computer Science and Engineering, along with the student volunteers from 4th year CSE: Dhruv Shetty, Athreya Shankar

Enigma Day (competition for incubation and support)



On May 2, 2024, at 2:00 PM, A J Institute of Engineering and Technology, Mangalore, hosted Enigma Day to promote self-awareness and responsibility among students. Prakruthi Shetty, a final-year CSE student, was the master of ceremonies. Athreya, another final-year CSE student, began the event with a prayer. Students organized entertaining games for the faculty, and final-year students presented mementos to faculty members as tokens of gratitude. Dr. Anthony P.J, the HOD, addressed the gathering, and Prajna, a final-year student, gave the vote of thanks.

Parent Teachers Meeting

The Department of Computer Science and Engineering organized a Parents-Teacher Meeting on July 13, 2024 for the students and parents on 2nd and 3rd year CSE. The Vice Principal and HOD, Dr Antony P J gave an overview of the institute, its accomplishments, and the placements of students. The vision mission of the Institute and the Department were also explained to the students and parents.



Farewell Function



The Department of CSE at AJIET held a farewell function for final-year students under the ENIGMA banner on May 21, 2024, at 1:30 PM in Seminar Hall 2. The event began with a prayer song by Ms. Dhriti and a lamp-lighting ceremony by the dignitaries, including Principal Dr. Shantharam Rai C, Dean of Academics Dr. Eshwarappa P, Vice-Principal and HOD of CSE Dr. Antony P J, and other HODs and staff members. Anum Fathima, a third-year CSE student, welcomed the gathering. Class advisor Mr. N Arul shared his experiences with the outgoing batch, and Principal Dr. Shantharam Rai C encouraged the students. Final-year students shared their experiences, and Dean Dr. Eshwarappa P wished them well. Dr. Antony P J offered guidance and tips for the future. The formal function concluded with a vote of thanks by Adithi, a third-year student, followed by entertainment programs organized by pre-final-year students.

Cooking without Fire Competition

On April 17, 2024, at 2:00 PM, A J Institute of Engineering and Technology, Mangalore, hosted a "Cooking Without Fire" competition for first-year CSE students. The event aimed to highlight the nutritional benefits of flame-free cooking, promote healthy eating, and discourage junk food consumption. The competition focused on evaluating the taste, hygiene, presentation, and uniqueness of the dishes, with a time limit of 1 hour and 30 minutes. The judges, consisting of CSE faculty, based their decisions on these criteria. The competition taught students meal preparation skills, boosting their self-confidence and fostering healthy eating habits.



Technical treasure hunt



On April 18, 2024, at 2:00 PM in seminar hall 3, Department of CSE of A J Institute of Engineering and Technology, Mangalore under the banner of ENIGMA, hosted the Event. The Tech Treasure Trail is a competition where teams of participants will compete against each other to solve clues, unlock puzzles, and complete challenges. The three Technical rounds were planned for students to solve the clues. The second and third Prizes were bagged by first year ICB students and first price was bagged by first year AIML students. The prizes were distributed for the students.

PROJECT FUND DETAILS

Sl.No	Project Name	Project Description	Funds Granted
1.	"Hand To Heart"	The Students from 7 th Semester, Department of Computer Science & Enginnering Nishanth Prajna P, Mouna RR and Sushma MalleshKalkad have got selected as the Seed Money Winner for the project entitled "Hand to Heart" under the guidance of Mrs. Snitha Shetty in Project Code Unnati Start-Up Challenge, 2023 – Idea presentation held at A J Institute of Enginnering & Technology, Magaluru on 09/11/2023	100000/-
2.	"Vegshell"	The Students from 7 th Semester, Department of Computer Science & Enginnering Deviprasad Rai P, Dhruv Kishor Shetty, Prateek Chandrashekar Kotian and S. Athreya Shankar have got selected as the Seed Money Winner for the project entitled "Vegshell" under the guidance of Mrs. Snitha Shetty in Project Code Unnati Start-Up Challenge, 2023 – Idea presentation held at A J Institute of Enginnering & Technology, Magaluru on 09/11/2023	100000/-
3.	"Hand to Heart – AI Driven Translation System"	The Students from 7 th Semester, Department of Computer Science & Enginnering Nishant, Prajna P, Mouna RR and Sushma Mallesh Kalkad have Selected for 47 th series of Student Project Programme 2023-24 by Karnataka State Council for Science and Technology (KSTSC) FOR THE Project titled " Hand to Heart – AI Driven Translation System" under the guidance of of Mrs. Snitha Shetty and Mr. Stanley P D'souza.	5000/-
4.	"360 degree Feedback Software for the Government Press Information Bureau (PIB) Using AIML"	The Students from 7 th Semester, Department of Computer Science & Enginnering Thejaswi D S, Sharath Kumar, Tikesh Raj and Varsha B Shetty have Selected for 47 th series of Student Project Programme 2023-24 by Karnataka State Council for Science and Technology (KSTSC) for the Project titled "360 degree Feedback Software for the Government Press Information Bureau (PIB) Using AIML" under the guidance of Dr. Antony PJ and Mrs. Ashwitha A Shetty.	5000/-
5.	"AI Asissted Distracted Driver Detection System"	The Students from 7 th Semester, Department of Computer Science & Enginnering Ahmad Midlaj B, Cliva Rhea Moris, Rahul M Moolya and Zaid Ali Ahmad have been selected for 47 th series of student project programme 2023-24 by Karnataka State Council for Science and Technology (KSTSC) for the Project titled "AI Asissted Distracted Driver Detection System" under the guidance of Dr. Antony PJ and Mrs. Vidya Myageri.	5000/-

FDP/Talk/workshop participation details

Sl.No	Details
1.	Mrs. Vidya Myageri, Asst. Prof, Dept. of CSE, participated in the online FDP titled "The Joy of Computing With Python", conducted by NPTEL from Jan – April 2024, hosted by IIT Madras.
2.	VijayKumar Dhudhanikar, Asst. Prof, Dept. of CSE, Attended the online FDP "Free Simulators for ECE Lab Practices" conducted by the Electronics and Communication Engineering Department, NITTTR, Chandigarh, from March 11 – March 15, 2024, hosted by A J Institute of Engineering & Technology, Mangaluru, Karnataka.
3.	Mrs. Ashwitha Shetty, Asst. Prof, Dept. of CSE, Attended the offline FDP "Machine Learning And Deep Learning Techniques for Cyber Security", Conducted by NMAMIT NITTE from Jan 8 – Jan 12, 2024, at NMAMIT Nitte.
4.	Mrs. Sharon D'Souza, Asst. Prof, Dept. of CSE, participated in the online FDP "Natural Language Processing", Conducted by NPTEL from Jan – April 2024, hosted by IIT Madras.
5.	Mrs. Snitha Shetty, Asst. Prof, Dept. of CSE, participated in the online FDP " Natural Language Processing", Conducted by NPTEL from Jan – April 2024, hosted by IIT Madras.

Students Paper publication details

- ❖ "Social Media Based Hate Speech and Stress Identification through Machine Learning and Natural Language Processing" by Ashwin Shetty, Jeevan M, Nishal SP Karkera, and Rahul D Shetty, under the guidance of by Mrs. Sharon C DSouza, was published in the International Advanced Research Journal in Science, Engineering and Technology, Vol. 11, Issue 4, April 2024.
- ❖ "Revolutionizing Car Care: A Mobile Application for Seamless Automobile Wash and Service Management" by Veena V R, Neha V P, and Farzeen Haris, under the guidance of Mrs. Aishwarya M Bhat, was published in the International Advanced Research Journal in Science, Engineering and Technology, Vol. 11, Issue 4, April 2024.
- ❖ "Autospa for Automobile Wash and Services" by Veena V R, Neha V P, and Farzeen Haris, under the guidance of Mrs. Aishwarya M Bhat, was published in the International Journal of Advanced Research in Computer and Communication Engineering, Vol. 13, Issue 4, April 2024.
- ❖ "KarmikConnect: Revolutionizing the Daily Wage Labor Market," by Namratha Shetty, Ananya G Adyanthaya, Swasthik Achar, and C A Prajwal, under the guidance of Mrs. Vidya Myageri, was published in Research in Applied Science & Engineering Technology, Volume 13, Issue 5, May 2024.
- ❖ "Knee-Jerk Reaction for Protecting Agricultural Farms from Invasion of Wild Animals," by Anvitha, Hrithik G H, Manvith K Amin, and Poojashree A S, under the guidance of Mr. Vijaykumar Dudhanikar, was published in the International Advanced Research Journal in Science, Engineering and Technology (IARJSET).
- ❖ "Personal Virtual Doctor," by Karthik H R, N R Neeraj, Vaishak, and Yashas Manjar, under the guidance of Mr. Stanley P DSouza, was published in the Advanced Research Journal in Science, Engineering and Technology (IARJSET), Vol. 11, Issue 5, May 2024.
- ❖ "Brain Tumor Detection With Deep Learning Using CNN," by Abhilash JY, Pramyia, Prathvi Devadiga, and Vidyashree Shetty under the guidance of Mr. Stanley P DSouza, was published in the International Advanced Research Journal in Science, Engineering and Technology (IARJSET), Vol. 11, Issue 5, May 2024.
- ❖ "Step Simple – Guiding the Visually Challenged," authored by Karthik Ganesh, Advait Prasad, and Mohammed, under the guidance of Mrs. Ashwitha A Shetty, was published in the International Journal of Advanced Research in Computer and Communication Engineering, Vol. 13, Issue 4, April 2024. This peer-reviewed journal has an impact factor of 8.102.
- ❖ "Toxic Comments Detection and Classifier," by Adarsh Vinod, Adithyan K V, Manoranjan M, and Ramsha Riyaz, under the guidance of Mr. N. Arul, was published in IJRESM, Volume 7, Issue 4, April 2024.
- ❖ "DRIVESAFE - The Emotive Transport Initiative," by Anvitha, Isha Sheikh Bashir, Mannya Anna Sam, and Sannidhi S Rai, under the guidance of Mrs. Sharon C DSouza, was published in the International Advanced Research Journal in Science, Engineering and Technology, Vol. 11, Issue 4, April 2024.
- ❖ "360-Degree Feedback Software for the Government Press Information Bureau (PIB) Using Artificial Intelligence and Machine Learning," by Sharath Kumar, Thejaswi D S, Tikeshe Raj, and Varsha B Shetty, under the guidance of Dr. Antony P J, was published in the International Advanced Research Journal in Science, Engineering and Technology, Vol. 11, Issue 4, April 2024.