



CANARA
ENGINEERING COLLEGE

2023,VOLUME II,ISSUE II



DARPAANA

NEWS LETTER FROM CANARA ENGINEERING COLLEGE



**Student
Achievements**

**Artificial Intelligence -
Build your
Own Generative AI Model**

"Be Curious about AI"

**Hands-on Workshop in
Machine Learning for
Beginners**

STAFF ACHIEVEMENTS

EDITORIAL

Dr. Basappa B Kodada
Associate Professor & HOD

Mr. Siju V Soman
Assistant Professor

Mrs. Sowmya D
Lab Instructor

STUDENT MEMBERS

Shashank S
4CB21AI041

Shivani K
4CB21AI042

Pratham R
4CB22AI040

Aashvi
4CB22AI001

VISION

To be identified as learning centre in the domain of Artificial Intelligent and Machine Learning education that delivers competent and professional engineers to meet the needs of industry, society and the nation.

MISSION

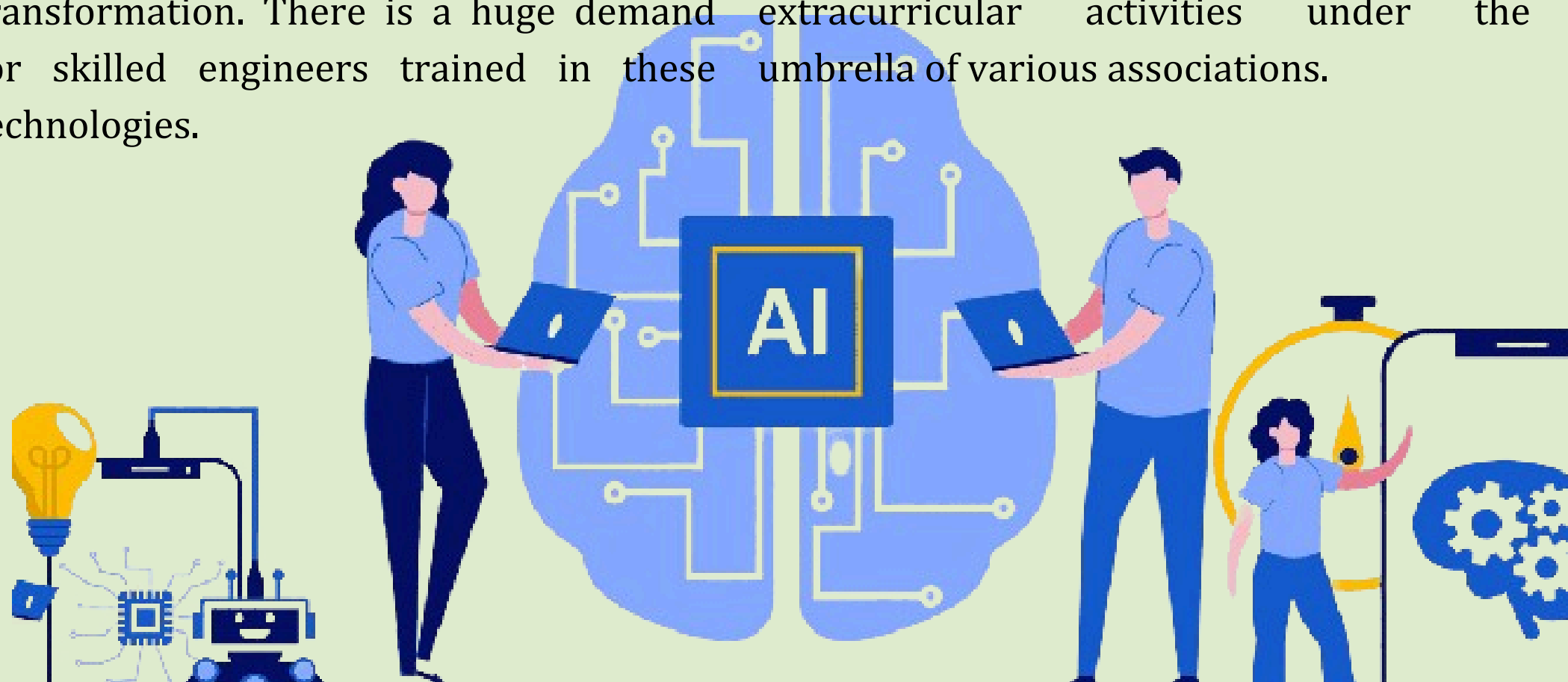
- To impart skill-based (Artificial Intelligent and Machine Learning) education through competent teaching-learning process
- To establish a research and innovation ecosystem that provides solution for technological challenges of industry, society and the nation.
- To set-up industry-institute interface for overall development of students through practical internship and team work activities
- To promote innovation and start-up culture among staff and students for addressing the challenges of needy.



DEPARTMENT PROFILE

The department was started in the year 2021 to offer under graduate degree programme i.e., Bachelor of Engineering (BE) in Artificial Intelligence and Machine Learning (AI&ML). AI&ML is a new and upcoming program in the area of computer science that is rapidly expanding its boundaries to variety of fields like healthcare, security, entertainment, education, autonomous transportation, intelligent robots, space exploration, speech processing, stock trading and many more. We have seen a lot of change in our lives because to artificial intelligence and its applications. AI aims to artificially imitate human intelligence in order to instil intelligence into robots. An application of AI called machine learning (ML) aims to give machines the ability to learn on their own. Numerous career opportunities have been produced as a result of AI and ML, which are significant drivers of the digital transformation. There is a huge demand for skilled engineers trained in these technologies.

A degree from this programme is valuable and helps students get employment in their fields. This course assists in developing fundamental knowledge and skills in the areas of mathematics, network architectures, computer vision, programming, communication networks, and machine learning courses which enrich the student skills and knowledge for developing smart and intelligent application which delivers the needs of society and nation. The department organizes training programmes for the staffs and students which helps themselves in technological advancements and present research findings. To increase the opportunity of placements to students and overall personality development, the department conducts and motivates them in soft skills training programmes, technical skill development activities, and initiatives on self-learning like certification courses through recognized online platforms and extracurricular activities under the umbrella of various associations.



PROGRAMME EDUCATIONAL OBJECTIVES (PEO)

- Design and develop learning-based intelligent systems in the field of artificial intelligent, machine learning, and allied engineering sectors.
- Apply skills and knowledge of computer science to address relevant industry and societal problems or pursue higher education and research
- Graduates will design and deploy software that meets the needs of individuals and the industries
- Engage in lifelong learning, career advancement and adoption of changing professional and societal needs.

PROGRAMME OUTCOMES (PO)

Engineering graduates in Artificial Intelligence and Machine Learning 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:** Select/Create and apply appropriate techniques, resources and modern engineering and IT tools, including prediction and modelling to complex engineering activities, taking comprehensive cognizance of their 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 relevant scientific and/or engineering practices.
- **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 the 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 above have the preparation and ability to engage in independent and life-long learning in the broadcast context of technological changes

PROGRAMME SPECIFIC OUTCOMES (PSO)

- **Intelligent systems:** Select appropriate technologies to analyse, design, implement, and deployment of smart and intelligent systems
- **Contemporary systems:** Design, and development of efficient IT solutions for challenging issues through experiential learning

NEW FACES OF AIML FAMILY



Mr. Siju V Soman
Assistant Professor



Mr. Divyesh Divakar
Assistant Professor



Mrs. Geetha
Lab Instructor

STAFF ACHIEVEMENTS

RECOGNITIONS



Dr. Basappa B. Kodada has been recognized as BoE Member for Computer Science and allied studies in VTU Belagavi for AY 2023-24 by VTU, Belagavi on 20th December 2023.

Mr. Divyesh Divakar has been recognized with a “Domain Certificate in Data Science” from NPTEL in October 2023, and he was also recognized with “NPTEL Discipline Star” from NPTEL in December 2023.



Webinar/FDP/Workshop/Training/Conference/Exhibition attended



Dr. Basappa B Kodada

Associate Professor & HOD

- Dr. Basappa B Kodada attended a Webinar on “Institutional Effectiveness for Inclusive Excellence: A Strategic Roadmap for Future” at Canara College, Mangalore on 02 July 2023.
- Attended an Exhibition on “IIC Regional Meet and Exhibition, Yukthi Innovation Challenge” at Reva University, Bangalore on 9th December 2023

Webinar/FDP/Workshop/Training/Conference/Exhibition attended

- **Mrs. Kanmani** attended a Webinar on “Institutional Effectiveness for Inclusive Excellence: A Strategic Roadmap for Future” at Canara College, Mangalore on 02 July 2023.
- Attended a Workshop on “Machine Learning for Beginners” at Canara Engineering College, Benjanapadavu on 25th & 26th August 2023.
- Attended an FDP on “Cloud Practitioner (AWS)”, organized by ICT Academy at Canara Engineering College, Benjanapadavu from 25th – 29th September 2023.
- Attended a FDP on “Building Dynamic Web Applications with AngularJS” at Canara Engineering College from 22nd to 23rd November 2023.



Mrs. Kanmani

Assistant Professor

Webinar/FDP/Workshop/Training/Conference/Exhibition attended



Mr. Siju V Soman

Assistant Professor

- Attended an FDP on “Computer Vision using OpenCV” organized by NITTTR, Chandigarh at Canara Engineering College, Benjanapadavu from 07th to 11th August 2023.
- Attended a Workshop on “Machine Learning for Beginners” at Canara Engineering College, Benjanapadavu on 25th & 26th August 2023.

Webinar/FDP/Workshop/Training/Conference/Exhibition attended



Mr. Nithin Kurup U G
Assistant Professor

- Attended a Workshop on “Machine Learning for Beginners” at Canara Engineering College, Benjanapadavu on 25th & 26th August 2023.
- Attended an FDP on “Cloud Practitioner (AWS)”, organized by ICT Academy at Canara Engineering College, Benjanapadavu from 25th – 29th September 2023.
- Attended a FDP on “Building Dynamic Web Applications with AngularJS” at Canara Engineering College from 22nd to 23rd November 2023.
- Has participated in 1st IEEE International Conference on Multidisciplinary Research in Technology and Management-MRTM 23 on September 2023.

Webinar/FDP/Workshop/Training/Conference/Exhibition attended

- Attended an FDP on “Computer Vision using OpenCV” organized by NITTTR, Chandigarh at Canara Engineering College, Benjanapadavu from 07th to 11th August 2023.
- Attended a Workshop on “Machine Learning for Beginners” at Canara Engineering College, Benjanapadavu on 25th & 26th August 2023.



Mrs. Supriya A V
Assistant Professor

Webinar/FDP/Workshop/Training/Conference/Exhibition attended



Mr. Divyesh Divakar
Assistant Professor

- Attended an FDP on “Design of Aero mechatronics and controls” at NMAMIT, Nitte from 25th to 27th September 2023.
- Attended a Training program on “VTU Consortium E-Resource Training Program” at Sahyadri College of Engineering & Management on 24th November 2023.

Webinar/FDP/Workshop/Training/Conference/Exhibition attended

- Attended an FDP on “R-Programming” at Canara Engineering College on 18th October 2023.
- Attended a FDP on “Building Dynamic Web Applications with AngularJS” at Canara Engineering College from 22nd to 23rd November 2023



Mrs. Sowmya D
Lab Instructor

Webinar/FDP/Workshop/Training/Conference/Exhibition attended



Mr. Jayaprakash
Lab Instructor

- Attended an FDP on “R-Programming” at Canara Engineering College on 18th October 2023.

Paper Published In Journals/book Chapters

Dr. Basappa B. Kodada, November 2023. “FSACE: finite state automata-based client-side encryption for secure data deduplication in cloud computing”. International Journal of Cloud Computing, 12(6), pp. 531-555 [SCOPUS].



Technical Paper Reviewed



Mrs. Kanmani Assistant Professor reviewed the technical papers of “International Conference on Intelligent Systems in Computing and Communication (ISCComm-2023)” organized by Mangalore Institute of Technology and Engineering, Moodabidri in 8th December 2023.

NPTEL

ONLINE COURSE

Mr. Siju V. Soman has completed 04 Certification Courses on

- “Principles of IoT & Python Basics
- MicroPython Board,
- Cloud Implementation Using Azure IoT and Azure AI Fundamentals
- Artificial Intelligence & Machine Learning” offered by Infosys Springboard from 21st November 2023 to 13th November 2023.



- **Mr. Divyesh Divakar** has completed 2 Certification Courses on “Deep Learning and Natural Language Processing” offered by NPTEL on November 2023.
- Completed a Certificate Course on “How to Research and Write Using Generative AI Tools” offered by LinkedIn Learning on December 2023.

Mrs. Sowmya D. has completed 02 Certification Courses on “Basics of Computer Networks, Applications of AI” offered by Great Learning on 7th October 2023 and 29th November 2023 respectively.



Mr. Jayaprakash has completed a Certification Course on “Python for Data Science” offered by Great Learning on 18th October 2023.

STUDENT ACHIEVEMENTS

TECHNICAL - NATIONAL LEVEL (18)

- Pallavi Bhat (4CB21AI025), Rashmitha G. (4CB21AI033) K. Sumanth (4CB21AI014) and Shrisha (4CB21AI047) participated in the Sr. ROBO RACER National Level Event held at Noida Indoor Stadium Complex, organized by TechnoXian.
- Anoop Sadananda Prabhu K. (4CB21AI004), Mehul Muralidhar Kini (4CB21AI015), Sarthak Pramod Pai (4CB21AI036) Akhila Prabhu (4CB21AI017) Vaidoorya Padiyar (4CB21AI057) and Rahul Bhat (4CB21AI018) participated in the ROBO SOCCER National Level Event held at Noida Indoor Stadium Complex, organized by TechnoXian.
- Shrisha (4CB21AI047) and Ranjith Kumar (4CB21AI032) participated in Drone Competition National Level Event held at Noida Indoor Stadium Complex organized by TechnoXian.
- Chaithanya Lakshmi (4CB21AI004), Varshini D. (4CB21AI058) and Naveen (4CB21AI024) participated in the Line Follower National Level Event held at Noida Indoor Stadium Complex organized by TechnoXian.
- Mukesh (4CB22AI036) participated in Roolathon National Level Event held at Srinivas Institute of Technology organized by Google Developer Student Club.
- Mukesh (4CB22AI036) and Lokesh (4CB22AI045) has successfully completed TechFusion 2.0 (National Level Mega Event) online platform

TECHNICAL – STATE LEVEL (84)

- Shravya J S(4CB21AI045), Shrijal(4CB21AI062), Madhushree(4CB21AI019), Chaithanya Lakshmi(4CB21AI008), Deeksha Divakar(4CB21AI010), Thanvi(4CB21AI054), and Ujwal(4CB21AI056) and M Rahul Bhat (4CB21AI038) has participated in Fusion Techaon-2023 on September 2023 at Alva's Institute of Engineering and Technology, Moodubidire.
- Shrijal(4CB21AI062) has participated in ROTOQUIZ inter college Quiz Competition- Mangaluru round for the 64th Ramnarayan Chellaran Shield held on 23rd September 2023.
- Anoop Sadananda Prabhu K (4CB21AI004) and Mehul Muralidhar Kini (4CB21AI015) has participated in inter college Competition Rotory-MSNIM Bis Quiz held at Manel Srinivas Nayak Institute of Management. and also participated both 'Goal In' and Codeblaze, both inter-collegial competitions, at Sahyadri College of Engineering and Management, and organized by Aerophilia 23.
- Sarthak Pramod Pai (4CB21AI036) has participated in inter college Competition "Goal In" held at Sahyadri college of Engineering and Management organized by Aerophilia 23.
- Anoop Sadananda Prabhu K (4CB21AI004) has participated in KCCI start-up meet on 9th December 2023.

WORKSHOP/PAPER PRESENTATION/SEMINAR CONDUCTED

Field Visit to MUTBI and Bio-Incubator GoK, Manipal (09-08-2023)

An Industrial Visit was organized by IEEE Canara Engineering Student Branch and Artificial Intelligence and Machine Learning Department for the Second Year students on 9th August 2023 at Manipal Universal Technology Business Incubator (MUTBI) and Bio-Incubation Centre, Manipal. This event was organized in association with Institution Innovation Council IIC CEC Chapter. Manipal Universal Technology Business Incubator (MUTBI) and Bio-Incubation centre are the initiatives of Manipal Academy of Higher Education, Manipal, and they provide services to students, faculty, alumni as well as people of the region to start their own Venture in line with the social objectives of Government of India. Mrs. Kanmani and Mr. Siju V. Soman, Assistant Professors, Department of AI&ML shared the responsibilities for successfully conducting the event. A total of 61 students and 4 faculty members participated in this event.



Hands-on Workshop in Machine Learning for Beginners (25-08-2023)

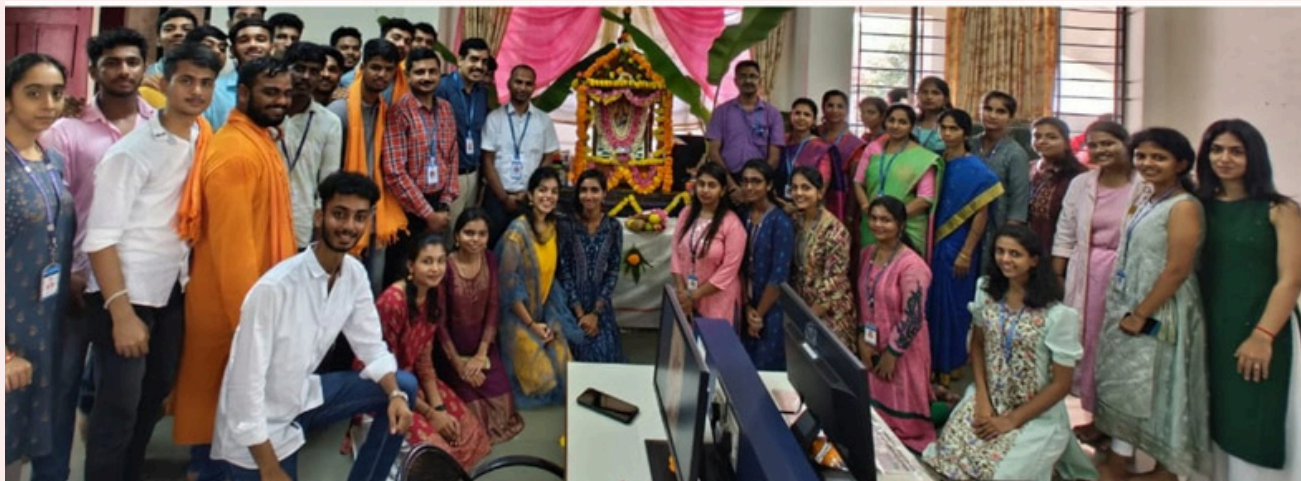
A two days hands-on workshop was organized by Artificial Intelligence and Machine Learning Department for the Second Year students of AI&ML and other CS allied branches on 25th and 26th August 2023 in Skill Lab, Canara Engineering College, Benjanapadavu, Mangaluru. This event was organized in association with Institution Innovation Council IIC CEC Chapter and Manipal School of Information Sciences (MSIS), Manipal.



Workshop/Paper Presentation/Seminar Conducted

Ayudha Pooja (31-10-2023)

Department of Artificial Intelligence & Machine Learning in association with the college cultural committee, celebrated 'Ayudha pooja' with great fervour on 31/10/2023. Labs were decorated by the students. Colorful flowers, incense, and traditional rituals added a spiritual touch to the occasion. Principal and HoDs of various departments were present during the celebration.



The event commenced with Saraswathi Pooja at 11.15AM, in Data Structures and Algorithms Lab of the department. Students, staff and faculty members paid their respects to the goddess of knowledge.

The lab computers and textbooks were also worshiped as part of the ceremony to recognize their significance in the pursuit of education and technological advancement.

Branch Entry 2023(17-11-2023)

The Branch Entry program was organized by the Central Arts and Cultural department of CEC on 17/11/2023 at the Open Air Auditorium (Main Stage). Principal Dr. Nagesh H. R. inaugurated the event. A total of 31 students from the second year AIML class participated in the event.



Workshop/Paper Presentation/Seminar Conducted



The students performed Skit, Dance and Song on the theme "Meme Mashup". Mr. Ajay Mahale and Ms. Hiba served as the MC, The event was monitored by faculty coordinator Mrs. Supriya A.V.

Motivational Story by a Successful Entrepreneur (22-11-2023)

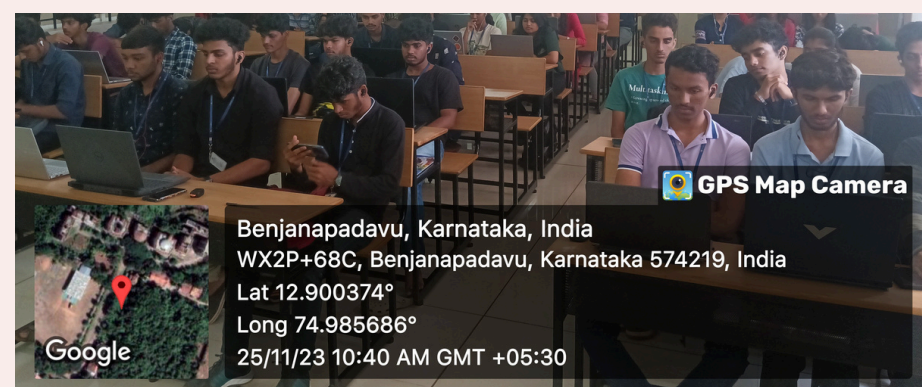
The event was organized by the department of Artificial Intelligence and Machine Learning and the main objective of this program was to provide awareness of the process and hurdles involved in setting up the startup. Mr. Shashi Kumar and Mr. Kishor Bhat, Infienersol Pvt. Ltd., were the resource persons for this event. The resource persons shared their valuable experience in setting up the venture.



The resource persons also shared their views on various opportunities available in the automobile industries as well as in the market. They enlighten the students in the direction of generating and identifying ideas for setting up their venture. A total of 126 students have participated in this event.

Artificial Intelligence -Build your Own Generative AI Model (25-11-2023)

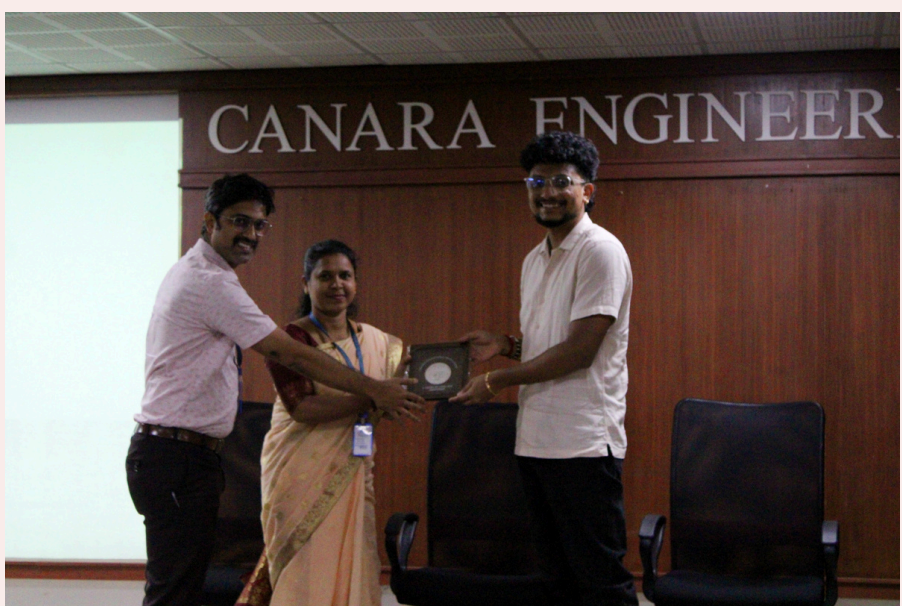
A hands-on workshop was organized by Artificial Intelligence and Machine Learning Department for the Second Year & third year students of AI&ML and other CS allied branches on 25th November 2023 at their respective classrooms using their laptop and smartphone in Canara Engineering College, Benjanapadavu, Mangaluru.



Workshop/Paper Presentation/Seminar Conducted

Technical Talk on "Be Curious about AI" (05-12-2023)

The Department of AIML hosted a Technical Talk on "Be Curious with AI" on 05-12-2023 at AC seminar Hall, Canara Engineering College. The session was presided by Principal Dr. Nagesh H. R. The program started with a welcome speech by Mr. Ashay Shetty, V semester AIML. The Principal addressed the students regarding the technical talk. The resource person Mr. Gavrish Prabhu, AI/ML Engineer at Nutanix, started the session with his insightful words. He was a graduate of Canara High School and Canara PU College.



Technical session on "Generative AI" (20-12-2023)

A 2-hour session on generative AI which covered key concepts, hands-on exercises, and discussions. The session gave an overview of Generative AI, Types of Generative Models, Key Concepts and Hands-on Exercise. Students were able to gain a foundational understanding of generative AI concepts, including how it differs from other forms of AI and its applications.



"This event was organized by the department of AI & ML for the 5th Semester AIML students and the resource person was Mr. Vinod Kumar, Co-founder & CEO, Aykan".