

DEPARTMENT OF ARTIFICIAL INTELLIGENCE
& MACHINE LEARNING

NEWSLETTER

CHATBOT

CHAPTER 01
MARCH 2023

*"Success in creating AI is the biggest event in human history"
Stephen Hawkin*



MANGALAM
COLLEGE OF ENGINEERING

Inspire | Imbibe | Innovate



HOD MESSAGE



Ms. NIMMYMOL MANUEL (HoD)
Department of Artificial Intelligence &
Machine Learning

I am happy to note that the Department of Artificial Intelligence & Machine Learning is releasing its first Newsletter CHATBOT for A. Y. 2022-23 enumerating our faculty and students' various activities and achievements. In the era of engineering and technology, this newsletter will motivate teachers and students of sharing their creativity and new ideas with the world and will help in their overall development. The department endeavors to produce confident professionals tuned to a real-time working environment. The department offers an excellent academic environment with a team of highly qualified faculty members to inspire the students to develop their technical skills and inculcate the spirit of teamwork in them. On this occasion, I congratulate all the team members of the editorial board for bringing up this issue in better shape.

Department of Artificial Intelligence and machine Learning

The Department of Artificial Intelligence and Machine Learning is established in the year 2021, offers an undergraduate programme B.Tech under the affiliation of APJ Abdul Kalam Technological University

Our initiatives will definitely mould the students in such a way that they face the external world with prompt technical, interpersonal and problem-solving skills. In order to prepare Industry ready students with holistic personality, we tie up with various firms and regularly organizes various activities like industry visits, technical talks, and real-time projects to hone the students' technical and soft skills.

Artificial Intelligence is a method of making a computer, a computer-controlled robot, or a software think intelligently like the human mind. AI is accomplished by studying the patterns of the human brain and by analyzing the cognitive process. The outcome of these studies develops intelligent software and systems.

AI is the main force of the fourth scientific and technological revolution, which is dedicated to embodying human intelligence through computational methods. It is widely used in various fields and currently mainly possesses functions such as voice and image recognition, logical reasoning ability, and emotion recognition

FACULTY DEVELOPMENT PROGRAMS



Ms.NIMMYMOL MANUEL

- Faculty development programme on Processing and Security of Digital Images held in NIT Patna 5 December 2022 to 9 December 2022

Ms. JUSTY JAMESON

- Faculty development program on AI for Multimedia processing and security held in National Institute of Technology Patna 18 February 2023-22 February 2023
- Faculty Development program on MLOps (Machine Learning Operations held in AIT-CSE Chandigarh University 2 February 2023 to 6 February 2023
- Faculty development programme on Processing and Security of Digital Images held in NIT Patna 5 December 2022 to 9 December 2022
- International FDP on Advanced Research and quality Publications at Federal Institute of Science and Technology from 29 August 2022 to 2 September 2022

Mr. DHEERAJ N

- Faculty development program on AI for Multimedia processing and security held in National Institute of Technology Patna 18 February 2023-22 February 2023
- Faculty Development program on MLOps (Machine Learning Operations held in AIT-CSE Chandigarh University 2 february 2023 to 6 February 2023
- Faculty development programme on Processing and Security of Digital Images held in NIT Patna 5 December 2022 to 9 December 2022
- -International FDP on Innovation in recent Trends In Computing conducted by JIS University from 28 November 2022- 2 December 2022

FACULTY DEVELOPMENT PROGRAMS



Ms. AISWARYA MOHAN K

- Faculty development program on AI for Multimedia processing and security held in National Institute of Technology Patna 18 February 2023-22 February 2023
- Faculty Development program on MLOps (Machine Learning Operations) held in AIT-CSE Chandigarh University 2 February 2023 to 6 February 2023
- Faculty development programme on Processing and Security of Digital Images held in NIT Patna 5 December 2022 to 9 December 2022
- Faculty development program on Demystifying Machine Learning Algorithm organized by Muthoot Institute of Technology & Science from 10 October 2022 - 14 October 2022
- Faculty development programme on Artificial Intelligence and Application conducted by Marian Engineering Collège from 29 August 2022- 3 September 2022

Pursuing Phd

Ms Nimmymol Manuel HoD
Wireless Sensor Networks from Karunya University, Coimbatore



PATENT

Ms Justy Jameson Assistant HoD

"Machine learning and Artificial Techniques for intrusion detection in network security" Application Number : 202241032409 A published on 25/11/2022 by Dr. Sahaya Kingsly, Ms Justy Jameson



WEBINAR

Design of Memory Circuits

Dr. Sarika S

Associate Professor
Naipunya Institute of Science and Technology

organized by Ms. Justy Jameson



WEBINAR

Constructing Green Buildings

Greeshma Raju

Assistant Professor
RIT Engineering College, Pambady

Organised by Ms. Aiswarya Mohan K

MOTIVATIONAL TALK

Future Approach to Organic Culture

Mr .George K Mathai

Deputy Director of Agriculture(Rtd)

Organised by Ms Justy Jameson
in association with Eco-Club





INDUCTION PROGRAM



Engineering colleges were established to train graduates in their respective branch/department of study, have a holistic outlook towards life, and have a desire to work for national needs and beyond. The graduating student must have excellent knowledge and skills in the area of his study. However, he must also have a broad understanding of society and relationships. The character needs to be nurtured as an essential quality by which he would understand and fulfil his responsibility as an engineer, a citizen and a human being. Besides the above, several meta-skills and underlying values are needed. The success of gaining admission into the desired institution but failure in getting the desired branch, with peer pressure generating its own problems, leads to a peer environment that is demotivating and corrosive. For some, the start of hostel life without close parental supervision at the same time further worsens it with also a poor daily routine.



When new students enter an institution, they also come with diverse thoughts, backgrounds and preparations. They come into a new unfamiliar environment, and many of them have little knowledge of a university/college. An important task, therefore, is to welcome the new students to higher education and prepare them for their new role. The transition from school to university/college life is one of the most challenging events in a student's life. Currently, precious little is done by most institutions, except for an orientation program lasting a couple of days. Student Induction is designed to help in the whole process.



ONAM CELEBRATION



SPORTS DAY

Mangalam college of engineering conduct the sports day of academic year 2022-2023 on 27th october 2022 in municipal stadium pala. Considering importance of sports in human life

Every sport requires some mental, physical and tactical discipline. Following rules, obeying the coach, practicing restraint, etc. are all forms of discipline children learn through sports. Discipline enables people to reach their full potential and realize their goals – a trait prevalent in all successful people.



STUDENTS ACHIEVEMENTS

Nandana Suresh

AI & ML

Top position in college in the university examination



T Allwin Kingstan

AI & ML

First prize winner of BYTES coding competition organised by FISAT



Alex J Mathew

AI & ML

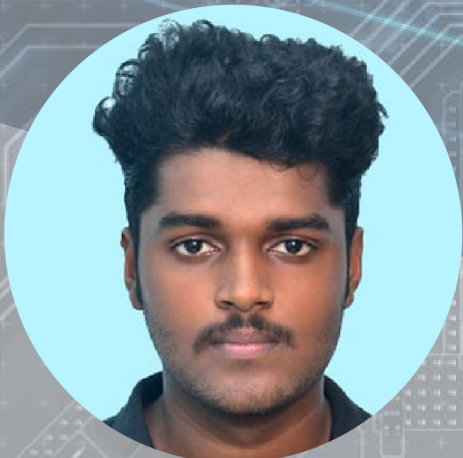
Elected as First year Student Representative



Jyothish V M (NCC Cadet,16 KL BN)

AI & ML

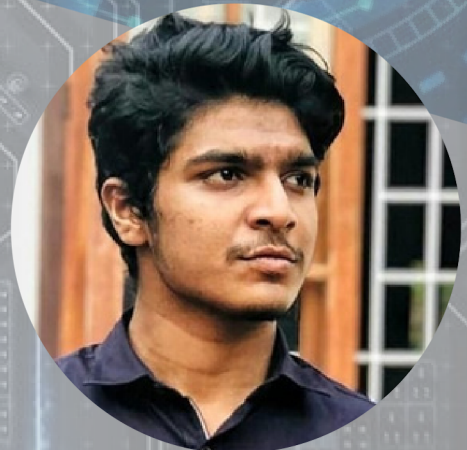
Got selection in Inter unit firing competition



Surya K Ratheesh(NCC Cadet,16 KL BN)

AI & ML

Got selection in Inter unit firing competition



WORKSHOPS ATTENDED BY STUDENTS

- Workshop on AUGMENTIA AR workshop organised by RIT Engineering college on 17 March 2023
- Workshop on Advanced software engineering virtual experience program organized by walmart Global Tech on 12 March 2023
- Workshop on Self driving electric vehicles organised by Techmaghi in association with KSHITT IIT KHARAGPUR on 28 January 2023
- Workshop on Self driving electric vehicles organised by Mahindra Reva dismantling from 19 November 2022 to 20 November 2022
- Workshop on Hardly Davidson Structural Design organised by MAR Asthanasius College of Engineering on 18 December 2022
- Workshop on poster designing concepts (IEEE) organized by MEA College of Engineering on 1 March 2022
- IEEE Workshop organized by Mangalam college of engineering on 16 may 2022

INTERNSHIPS ATTENDED BY STUDENTS

- Five day internship on topic ROBOTICS organised by techmaghi from 27 December 2022 to 31 December 2022
- Voice of customer training organised by K-DISC
- Training in AI organized by Skill Vertex 5 September 2022 to 5 October 2022
- Internship at Tech by Heart Kadavanthara 1 September 2022 to 6 September 2022



AI WORKSHOP
Artificial Intelligence Ethics, Impact and Creativity



Ms. Justy Jameson
Assistant professor (Asst.HOD)

Brain-Computer Interface With Microneedles

Engineering researchers at the University of California – San Diego have invented an advanced brain-computer interface (BCI) consisting of a flexible and moldable backing, as well as penetrating microneedles. The flexible backing enables the BCI to more evenly conform to the brain's complex curved surface. It also allows the BCI to more uniformly distribute microneedles that pierce the cortex.

These microneedles are 10 times thinner than human hair and come out of the flexible backing. They then penetrate the surface of the brain tissue without piercing surface venules. The microneedlers are able to record signals from nerve cells in the cortex.

The system demonstrated a performance on par with the existing gold standard for BCIs with penetrating needles. Called the "Utah Array," this standard has been shown to help individuals with spinal cord injuries and stroke victims. They can use their thoughts to control robotic limbs and other devices.



Mr. Dheeraj N
Assistant professor

ChatGPT

One of the hottest topics in the field of AI right now is ChatGPT, short for chat-based Generative Pre-trained Transformer. This powerful tool is being used across industries and for many use cases.

ChatGPT is the most impressive AI language model we have seen to date. Developed by the company OpenAI, it relies on deep learning techniques to generate text based on the input you provide to it. The tool was trained on a massive collection of text data, which enables it to generate human-like responses to a wide range of text prompts.

ChatGPT can be used for various natural language processing (NLP) tasks. These include question answering, text generation, and language translation. Early results in benchmark tests have proven impressive, with the tool demonstrating an ability to generate not just coherent, but also contextually appropriate responses. The model's capabilities make it an excellent tool for applications in content creation, customer service, and any other fields where there is a need to generate text.



Ms. Aiswarya Mohan K
Assistant professor

AI with Human-Like mind

A team of researchers took a big step towards the development of a neural network with meta memory through a computer-based evolution experiment.

Metamemory refers to any judgment that is made about a memory. These include feelings-of-knowing about memories and judgments of learning, as well as source judgments.

It is the "process by which we ask ourselves whether we remember something, and that memory is used to decide on current actions." By achieving such a neural network, we will be closer to having machines with human-like memories!

"In order to elucidate the evolutionary basis of the human mind and consciousness, it is important to understand metamemory," "A truly human-like artificial intelligence, which can be interacted with and enjoyed like a family member in a person's home, is an artificial intelligence that has a certain amount of metamemory, as it has the ability to remember things that it once heard or learned."

DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

Our Vision

“To emerge as a center of excellence in technical education and research, creating employable and committed professionals.”

Our Mission

“Inspire the learners to be globally competent engineers through innovative teaching and learning methods and imbibe a sense of social responsibility and creative inquiry in them that leads to higher learning and research.”



विश्वं शास्त्रे प्रतिष्ठितम् ।

MANGALAM COLLEGE OF ENGINEERING

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