A I M L   M A T T E R S

Newsletter

March – April 2023

Department Of Artificial Intelligence & Machine learning

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Issue 4

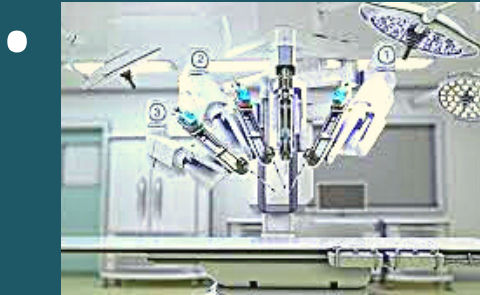Frequency : Monthly

Dept. Of AI&ML

A I M L   N E W S   F L A S H

- Preface -

- **Surgical Robots:**

    With the combination of artificial intelligence capabilities and collaborative robotic functions, surgical robots are revolutionizing operation theatres. Although today's surgical robots are capable of autonomously conducting surgical procedures, doctors still stand alongside them to look over the operations. However, they can do simple tasks and repetitive movements without the doctor's assistance. By infusing AI capabilities in the surgical robots, they can improve control accuracy to sub-millimetre precision

- **Image Generated by DALL-E!!**

    DALL-E (stylized as DALL. E) and DALL-E 2 are deep learning models developed by OpenAI to generate digital images from natural language descriptions, called "prompts". DALL-E was revealed by OpenAI in a blog post in January 2021, and uses a version of GPT-3 modified to generate images.

"AI is a Tool. The choice about how it gets deployed is ours!!"

LET US C - CODING CONTEST

On 02-03-2023 a programming contest was organized based on the C language named "Let us C" by the department of Artificial Intelligence and Machine Learning under JNNCE ACM events. There were 230 participants from 115 teams. Participants were made a team of two, first round was multiple choice questions, based on C programming which they learned in their academics, according to their performances 26 teams were selected for the second round. In the second round a problem statement was given to solve through Hackerrank on the spot , to the team who has given the right answer were awarded cash prize and certificates. Winners of this event are as follows:

1. Yashaswini BM (ISE) and Sindhu Venkataramana (ISE) secured 1st place and received the amount of INR 3000.

2. Prerana SV (TCE) and Aishwarya SP (CSE) secured 2nd place and received the amount of INR 2000.

3. A S Srividya (ISE) and Bhoomika D (ISE) secured 3rd place and received the amount of INR 1000.
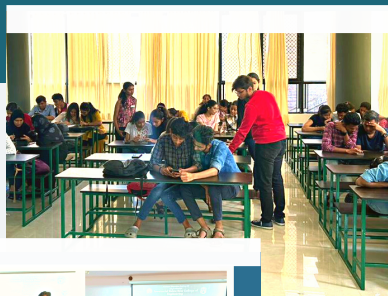
CANVA COMPETITION

On 06-03-2023 a Poster Making Contest was organized the Department of Artificial Intelligence and Machine Learning under Falcon Student Forum and JNNCE ACM events. There were 18 participants and were given the topic to design a Newsletter froma a plain page(without using Templates). The work was very creative that there turned to have 5 winners of the contest. All the participants were given the participation certificate and the winners are taken in the designing team of the department.

The WINNERS are as follows:

1. Vaishnavi M Vaidya
2. Deepthi Shivkumar
3. Aishwarya R
4. Chitralekha P
5. Ananya G Yadagere.agere.
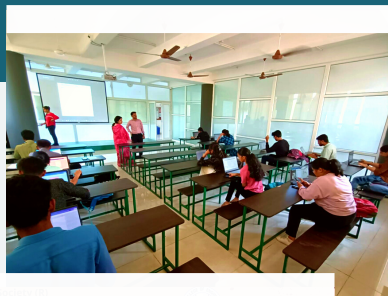
COOKING WITHOUT FIRE COMPETITION

On 13th of March, the Department of AIML successfully conducted a Cooking Without Fire Contest as part of the SCR subject activity, promoting social interaction among students. All participants showcased their creativity and culinary skills by preparing delicious dishes using alternative techniques. The event fostered cooperation among students, as they exchanged ideas and strengthened bonds. The judging panel was impressed by diverse range of dishes, and the atmosphere was filled with excitement. Nearly 10 teams consisting 6 to 8 students, participated in this event. Congratulations to all participants for their outstanding efforts, and thanks to the faculty and staff for their support. This event exemplified the vibrant spirit and talent of AIML students, and we look forward to more engaging activities in the future.

EXPERT'S TALK

Mr. Koushik Udupa

Co-founder of Ekatva Innovations and our Proud Alumni

On 03-03-2023, the department of Artificial Intelligence and Machine Learning arranged an expert talk by Mr.Koushik Udupa the Co-founder of Ekathva Innovations and our proud alumni. He gave an hour talk about the topic "Voice of customers Entrepreneurship Journey", he said about his journey and how he started and gave a brief to all the students on how they've to involve themselves. Ekathva Innovations is about modern agriculture and how technology is used by all farmers. He also explained the Statics of a startup company along with that he guided on how a team should build up with ideas and most importantly customer feedback. At last, an open discussion was made with the students to get some more clarity on entrepreneurship.

AN INVITED TALK ON

"Voice of customers-Enterprenurship journey"

FRIDAY
03 MARCH 2023

AI NEWS
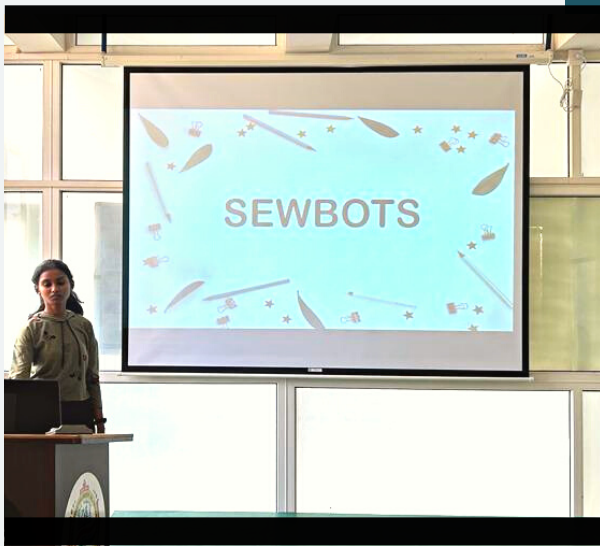
Presentation by Priyanka Ashwath on 27.01.2023

SEW BOT

Sewbots are powered by revolutionary smart vision technology. Like an autonomous driving car, cameras and sensors steer the Sewbot while recognizing textile distortion and adjusting the material in real time as it travels through the sew head, just like a seamstress. It helps manufacturers, brands, and retailers to source and manufacture clothes faster with increased quality and predictability.

SoftWear says Sewbots-as-a-Service creates "immediate return on investment" benefits while enabling scale across retailer, brand, and manufacturer.

Presentation by Puneeth A S on 03.02.2023

AI FACE RECOGNITION

Face recognition uses AI algorithms and ML to detect human faces from the background. The algorithm typically starts by searching for human eyes, followed by eyebrows, nose, mouth, nostrils, and iris. The most common type of machine learning algorithm used for facial recognition is a deep learning Convolutional Neural Network (CNN).

Amazon Rekognition makes it easy to add image and video analysis to your applications. You just provide an image or video to the Amazon Rekognition API, and the service can identify objects, people, text, scenes, and activities. It can detect any inappropriate content as well.

Presentation by Kusumitha R on 03.02.2023

APPLICATION OF AI IN JAPANESE LIBRARY

Robotics and artificial intelligence technology are rapidly spreading in libraries. Conventionally, libraries have used an auto book circulation system or automated storage and retrieval system (ASRS) both with automatic control technology. In recent years, robots have been used in various other places in Japanese libraries. The humanoid robot 'Pepper' developed by Softbank is already active in dozens of libraries.

Some libraries have implemented AI partially, like virtual reference chatbots that use machine learning as a subtype of AI. Through these services, a librarian can answer its patron regarding library queries.

AI NEWS

Presentation by Varsha A S on 10.02.2023

STABLE DIFFUSION AI

Stable Diffusion is a deep learning, text-to-image model released in 2022. It is primarily used to generate detailed images conditioned on text descriptions, though it can also be inpainting, outpainting, and generating image-to-image translations guided by a text applied to other tasks such as prompt. Emad Mostaque, founder of Stable Diffusion on Al.

Stable Diffusion is an open source artificial intelligence designed to generate images from natural text. This means that users can make a request using natural language and the AI will interpret and generate an image that reflects the request.

Presentation by Tanisha G Hosur on 10.02.2023

AI POWERED GLASSES

With Generative Al-enabled AR glasses, wearers can literally transpose their imaginations into the real world. Without needing to code, wearers can use voice recognition to 'speak' their images and 3D objects through their AR glasses exactly how they want it. They use AI and machine learning to process data from the surrounding environment and present it to the wearer through voice output.

Users with vision impairments can read and write without the assistance of scribes when they put on these new smart glasses.

Presentation by Shatika T Hegde on 10.02.2023
POISED AI

Poised is the Al-powered communication coach that helps you speak with confidence and clarity through real-time feedback, insights from post-meeting analytics, and a personalized improvement plan. A growing platform name Poised is an Al-powered communication coach that combines machine learning and natural language processing to help individuals improve at communicating.

It is Private and secure, an essential tool for digital-first workplaces. Works with Zoom, Slack, Microsoft Teams, and Google Meet, among other platforms. AI coaching works well when there are clearly defined goals and explicit measures of success.

AI NEWS

Presentation by Sofiya Sarah Asif on 10.02.2023
WOE BOTS

Woebot is an automated conversational agent (chatbot) who helps you monitor mood and learn about yourself. Drawing from a therapeutic framework known as Cognitive Behavior Therapy, Woebot asks people how they're feeling and what is going on in their lives in the format of brief daily conversations.

Woebot deliver CBT to adolescents with depression in the context of primary care management. Dr. Alison Darcy founded the Woebot with mission to make the best psychological tools radically accessible to those who need them. Woebot is geared towards young adults experiencing stress and wellness difficulties.

Presentation by Chandana V N on 24.02.2023
GOOGLE AI -- PREDICTION OF HEART DISEASE

Researchers at Google used retinal fundal images, which show blood vessels at the back of the eye, to predict various risk factors, such as age, gender, blood pressure, and smoking, that influence major adverse cardiac events. The investigators have discovered-through a multicenter trial-that measurements made by the AI algorithm from CT angiography images accurately predicted heart attack risk within five years.

The Google AI algorithm was trained on a dataset of 284,335 patients, including their retina scans and medical records.

Presentation by Dhanalakshmi C on 24.02.2023
BRAINCO FOCUS HEADBAND

By using its proprietary sensors to detect brain signals and deploying AI algorithm to translate signals into focus levels in real time, the headband might provide better awareness of when that occurs and perhaps help the student and teacher, and track whether a user is focused or distracted. An advanced EEG wearable that helps users train their brain for better focus and a calmer mind.

Some students have difficulty staying on task, and a headband might provide better awareness of when that occurs and perhaps help the student and teacher.
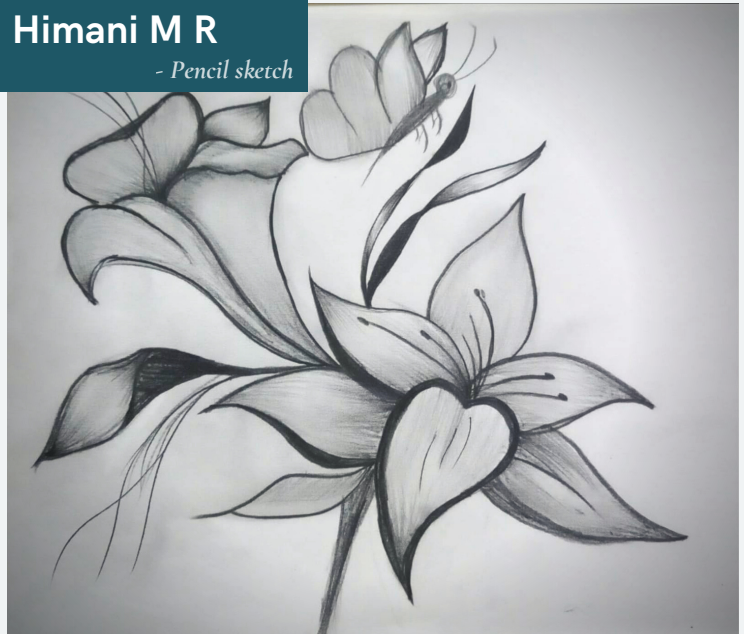
Priyanka Ashwath
- Mandala art

Himani M R
- Pencil sketch

Apoorva D
- Digital art

OUR WORKS

💡 Interesting Facts and Stuffs !!

>> AI-enabled devices are everywhere. Nearly 77 percent of devices today use AI technology in one form or another.

>> By 2030, Artificial Intelligence will add 15.7 trillion dollars to the world's GDP, boosting it by 14 percent.

>> Current Artificial Intelligence stats point out that 41 percent of people who use smart devices utilize the voice-search feature as often as once a day.

Fun facts !!

When typewriters were introduced, typing too quickly would jam the keys. To prevent this from happening, QWERTY was introduced which placed common alphabets at a distance from each other and slowed typists down.

'Typewriter' is the longest word you can type on a QWERTY keyboard, using only one of the rows on your keyboard.

Edited by :

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