DEPARMENT OF ARTIFICIAL INTELLIGENCE & DATA SCIENCE

Tech Talk on

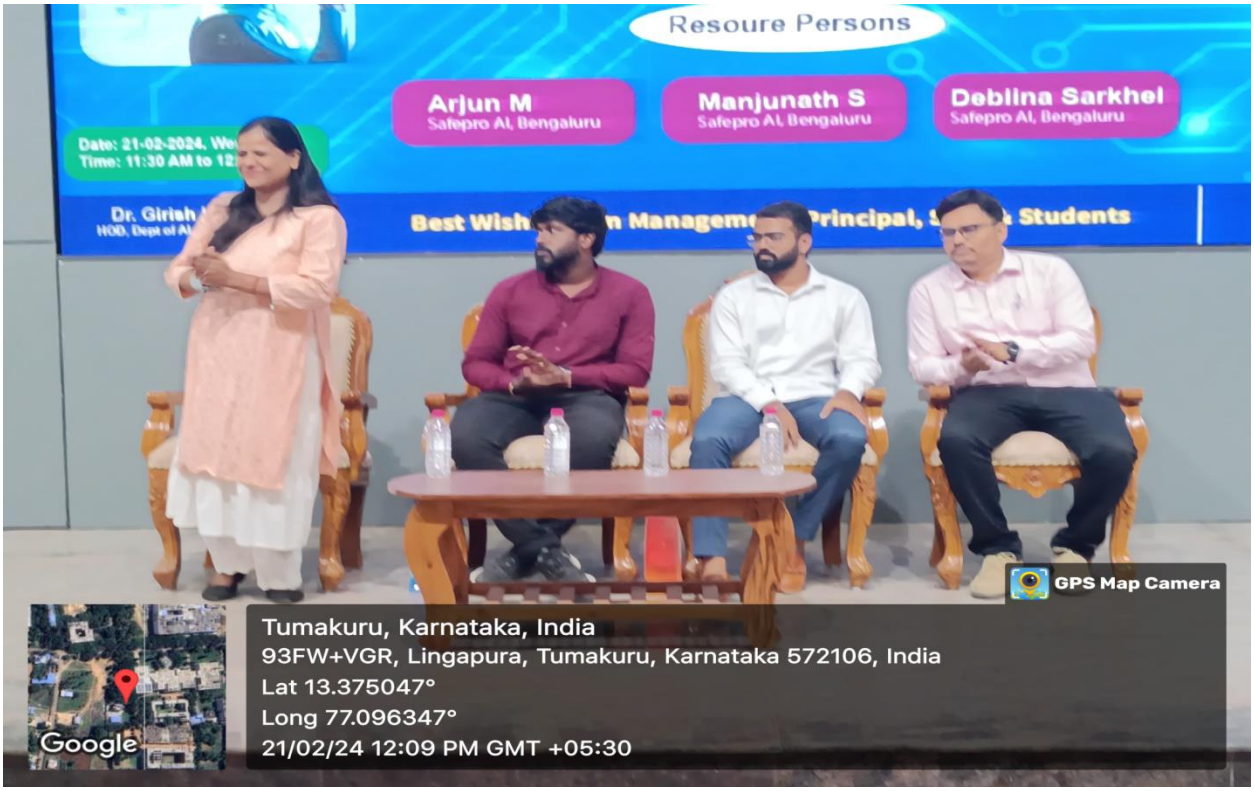
AI Computer Vision Technology

DATE-21/01/2024

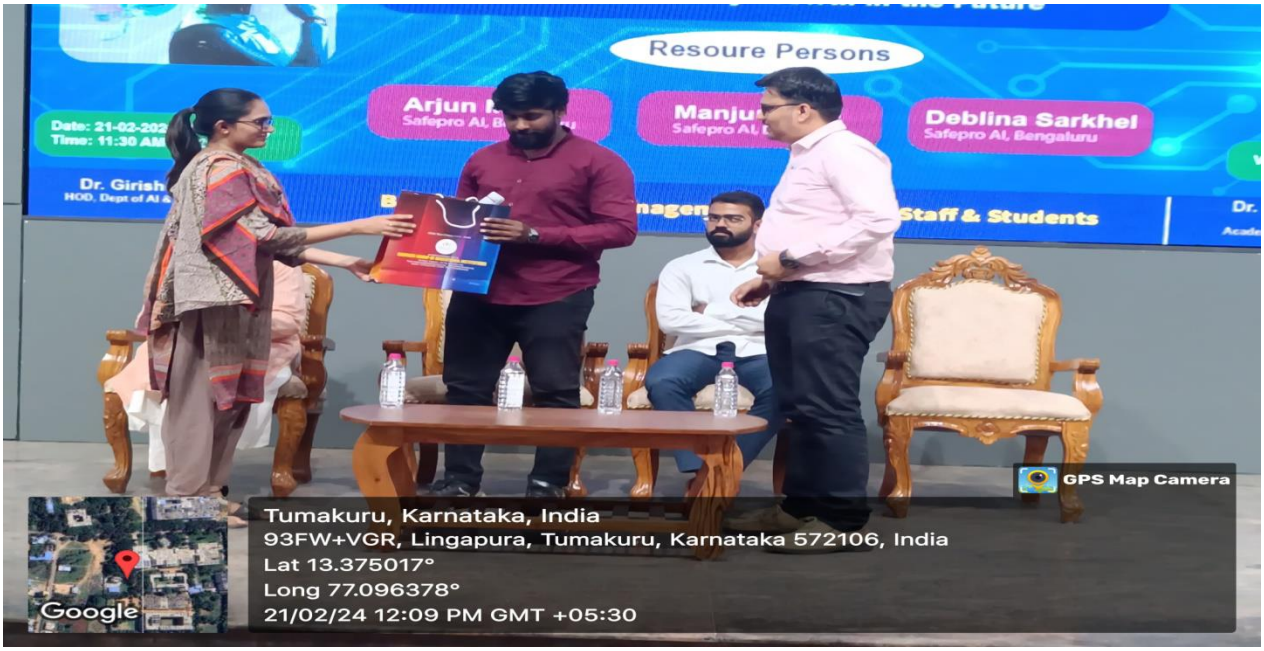
TIME- 11:30 A.M-1:00 P.M

PICTURES-

This Tech Talk held on **SHRIDEVI Auditorium**, They are the guests of our Event they are the resource persons and Experienced.



Dr. Girish L, HOD, AI&DS Dept. addressing our guests and welcoming them to our Institution.



Welcome to our Institution! we're delighted to have you here. As a token of our appreciation, please accept this gift. Enjoy your time with us!

In Tech Talk, students encounter various concepts across **AI Computer Vision Technology**.

AI computer vision technology refers to the field of artificial intelligence (AI) that enables computers to interpret and understand the visual world, much like humans do. It involves developing algorithms and systems that can automatically extract, analyze, and interpret information from images or videos. Computer vision technology enables machines to perceive and comprehend the visual content of digital images or videos, allowing them to make decisions, recognize objects, understand scenes, and perform various tasks that require visual understanding.

Key components and techniques commonly used in AI computer vision technology include:

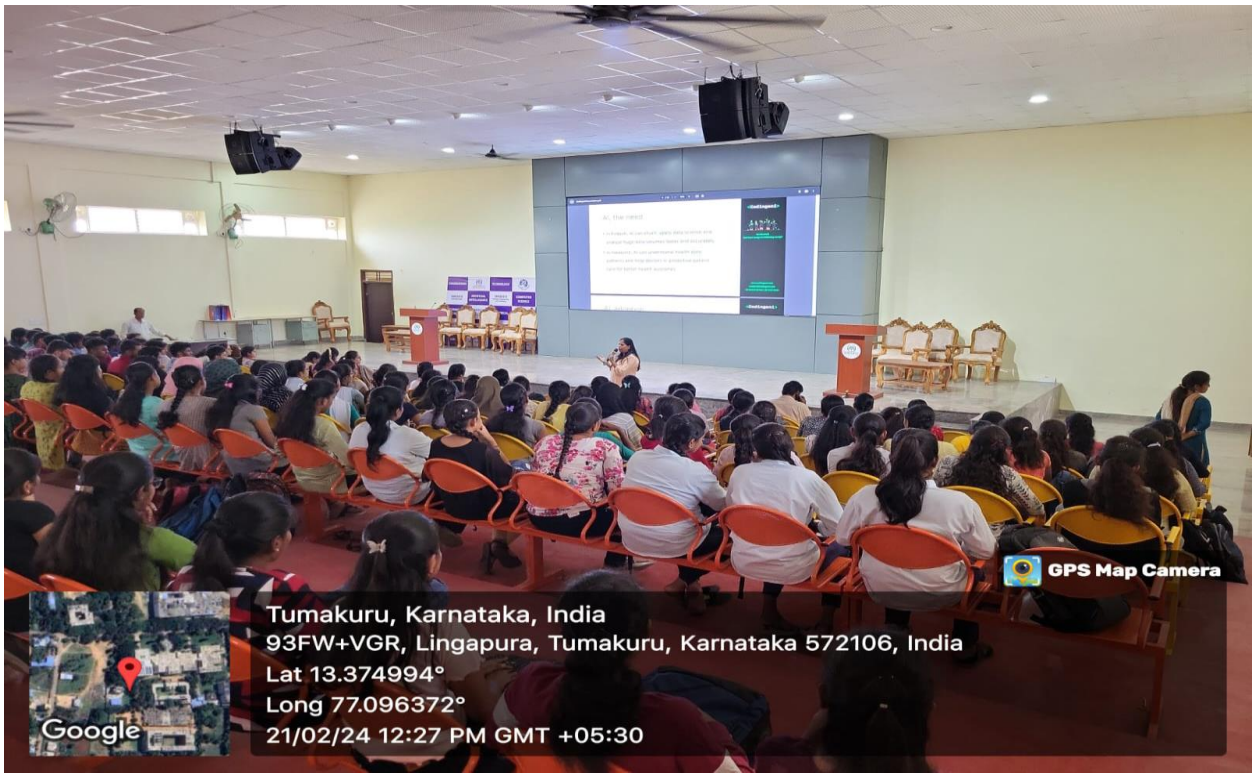
1. **Image Recognition:** This involves identifying and classifying objects or patterns within images. Convolutional Neural Networks (CNNs) are widely used for image recognition tasks.
2. **Object Detection**: Object detection involves locating and classifying multiple objects within an image or video frame. Techniques like the Region-based CNN (R-CNN) and its variants, such as Faster R-CNN and Mask R-CNN, are commonly used for object detection tasks.
3. **Image Segmentation:** Image segmentation divides an image into multiple segments or regions based on certain characteristics, such as color or texture. This is useful for tasks like medical image analysis, autonomous driving, and more. Deep learning-based approaches like U-Net and Fully Convolutional Networks (FCNs) are commonly used for image segmentation.
4. **Pose Estimation:** Pose estimation involves determining the pose or orientation of objects or people within images or videos. This is used in applications such as augmented reality, robotics, and human-computer interaction.
5. **Feature Extraction:** Feature extraction involves identifying and extracting meaningful features from images that are useful for subsequent analysis or recognition tasks. CNNs are often used to automatically learn relevant features from images.
6. **Object Tracking:** Object tracking involves locating and following objects of interest across multiple frames in a video sequence. This is important in surveillance, autonomous vehicles, and sports analysis, among other applications.

7. **Scene Understanding:** Scene understanding involves analyzing and interpreting the content and context of an entire scene within an image or video. This includes understanding relationships between objects, scene layout, and contextual information.
8. **Deep Learning:** Deep learning techniques, particularly deep neural networks, have revolutionized computer vision by enabling the development of highly accurate and scalable models for various tasks.

AI computer vision technology finds applications in diverse fields such as

- Healthcare (medical image analysis),
- Automotive (autonomous driving),
- Retail (visual search and recommendation systems),
- Security (surveillance and biometrics),
- Agriculture (crop monitoring), and
- Entertainment (augmented reality and virtual reality), among others.

As technology advances, AI computer vision continues to play an increasingly significant role in various aspects of our lives.



Resource Person will guiding the students to Career Opportunity and Growth in the Future.

Bridge the _ gap;

from graduates ----------> to job-ready

There is a gap indeed between Graduated and Industry Ready. While you're studying, learn and gain the coding experience bridging the gap between being a graduate to becoming job ready in the field of tech.

< Welcome to Codingeni >

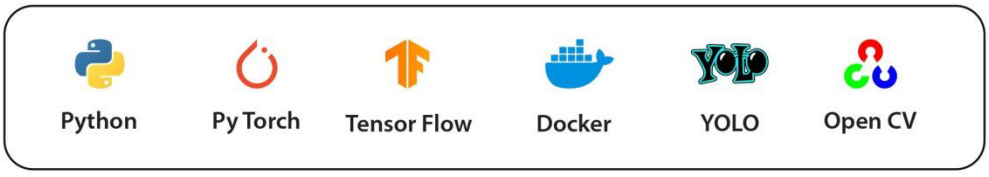
Codingeni isn't about training, but about becoming ready for a career. It's a journey towards getting job ready from mere graduating. Going from one classroom to another will only give you the theory, but acquiring skills and the applying it is obtained when you build to learn. This is what Codingeni does with you.

< Career in AI >

AI is generating abundant career opportunities in the job markets in India and the world. With every sector today adopting AI for their core works and competencies, the need for AI developers is ever increasing. But unfortunately, only a handful of engineers are equipped with the AI tools compared to the huge demand. AI being an applied science, student only learns from building a project in AI than learning from a mere classroom.

< Become a AI Developer >

Learn coding in AI from a scratch from experienced developers on various essential tools to become and coding genius in computer vision platform.



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Get trained from an AI developer and not a faculty.

Get trained from the convenience of your home or college with our online Developer-led training program.

You'll work on live commercial AI projects and no sample lab projects in training institutes.

You'll be coding as an AI developer at the end of the program.

Option to take up internship after the training.

< Why Codingeni? The Difference. >

1. You're not taught by a faculty, but an experienced Developer.
2. You'll not be working on some lab projects but will be coding on live commercial projects giving you the experience and edge of gaining core knowledge and not bookish.
3. You'll not be learning from some recorded classes, but Developer-led live online sessions.
4. You're evaluated rigorously in your coding capability at frequent intervals making you a thorough coder.
5. We focus on core coding skills minus the crap of 'we'll do this, we'll do that'. All we do is to ensure you become a skilled Coder or in other words Codegeni that attracts the best employers to you.

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