IIITDM KANCHEEPURAM

Developing Real-Time Computer Vision for Industrial Application using Raspberry Pi

Date: 28th June 2025

Time	09:30 AM-10:30 AM		11:00 AM-01:00 PM		2:00 PM-02:30 PM	2:30 PM-05:00 PM
Programme	• Brief of Computer vision • Medical Application Based Image acquisition. • Introduction to openCV and Tkinter	Break	Hands-on session for Image Acquisition by USB Camera, Web Camera and XIMEA Camera	Lunch Break	Brief indroduction on Machine learning in Computer Vision using Tensor Flow for Real-time AI detectoin	Hands-on session of Computer Vision

Details of the course:

- **Dates:** 28th June 2025
- **Number of participants:** 15 (based on a first come, first basis)
- **Registration fees:** Rs. 1500/-
- **Medium of instruction:** Inperson
- **Last date of registration:** 10th June, 2025
- **Venue:** IIITDM Kancheepuram

Who Can Apply?:

- Students (UG/PG)/Full time PhD Scholars, Faculty/R&D Organizations, Industry Participants

Registration:

- Applicants can fill the form and pay the registration fee by the given link https://forms.gle/8SkmzMaJ63XeonY68

Highlights of the course:

- Certificate on the successful completion of the course.
- Installation and set up of industrial camera for imaging application on Rpi 5.
- Integration of real-time AI model with industrial camera.
- 5 Groups of 3 candidates for Hands on section.
- Learn about choosing appropriate optical lens for different image application.
- Hands on session for Python libraries - OpenCV, MediaPipe, Tkinter

Requirement:

- jupyter notebook for Hands-on section.

Instructor: Dr. Uttam M. Pal
Assistant Professor, Department of Electronics and Communication Engineering, IIITDM Kancheepuram

Instructor: Mohammed Ansar PT
Project Research Scientist-ICMR, IIITDM Kancheepuram

Instructor: Ms.Keerthana Aruldoss
Junior Research Fellow
JIPMER Pondicherry

For any queries, please write to uttampal@iiitdm.ac.in