

# One Week Online Short Term Training Program (STTP) on

# "AI and Machine Vision for Robotics"

12 - 16 June 2023

## Organized by:

Centre for AI, IoT, and Robotics

Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram, Chennai – 600127



Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram (IIITDM Kancheepuram) is an Institute of National Importance established in 2007 by the Ministry of Education, Government of India, to pursue design and manufacturing oriented engineering education and research and to promote competitive advantage of Indian products in global markets. The institute is presently offering various B.Tech programs in Computer Science and Engg., Electronics and Communication Engg., Mechanical Engg., and Smart Manufacturing, M.Tech & DD programs, and inter-disciplinary Ph.D programs in core and applied areas of engineering.

#### ABOUT THE CENTRE

The Centre for AI, IoT, and Robotics was inaugurated by the *Hon'ble Finance Minister, Smt. Nirmala Sitharaman* on 10<sup>th</sup> Sep. 2022 with the vision of enhancing the skill sets of researchers and students in Robotics & Automation, Smart Manufacturing, IoT, and allied areas. The Centre also aims to support various GoI schemes such as Skill India, Make in India, Digital India, Start-up India, Smart City Scheme, PMKVY 3.0, and NEP2020.

#### ABOUT THE STTP

The curricula of various engineering programs at many universities in India are being updated to meet the challenging demands of industry and society, especially in emerging areas such as Robotics, Drones, AI, Data science, etc. In order to meet such demands, the faculties have to continuously upgrade their skills and knowledge which would ultimately support the students (the Young India) to learn and nurture a productive culture. Hence, this STTP is aimed to upskill the knowledge required to learn, understand, and teach AI & Machine Vision techniques suitable for robotic applications.

#### WHO CAN ATTEND

- > Faculties from technical institutions
- Research scholars / PG & UG students
- ➤ Scientists/Professionals from R&D institutions/industries

#### TOPICS TO BE COVERED (Tentative)

- ❖ AI & ML Techniques
- **❖** AI for Robotics
- ❖ Robot Kinematics & Differential Motion
- Image Processing & Machine Vision
- Computer Vision for Robot Learning
- \* ROS Theory & Practice
- Robot Integrated Image Acquisition
- ❖ AI for Self-Driving Cars
- ❖ Vision Aided Unmanned Arial Vehicles (UAVs)
- Efficient Vision Transformer Models
- ❖ Generative Models and Applications
- ❖ Digital Yoga & NEP2020

#### **REGISTRATION FEE\***

Category	Fee (Rs.)	GST (18%)	Total (Rs.)
Students & Full time Ph.D Scholars	2,000	360	2,360
Faculty / R&D Organization	2,500	450	2,950
Participants from Industry	4,000	420	4,720

#### **IMPORTANT DATES**

Payment of Fee & Registration (Online)
Begins - End: 20/04/2023 - 20/05/2023

- \* Applicants are requested to pay the registration fee using <a href="https://www.onlinesbi.com/sbicollect">https://www.onlinesbi.com/sbicollect</a> [Search by "IIITDM" IIITDM Educational Events Payment Category "STTP ON AI FOR ROBOTICS"] and then submit the registration form <a href="https://forms.gle/dkCj6U5P3SdYiGXeA">https://forms.gle/dkCj6U5P3SdYiGXeA</a>. Registration fee includes course material (soft copy), and participation certificates (scanned copy by email and hard copy by speed post).
  - For further information, submission of registration form, and other updates, please visit <u>www.iiitdm.ac.in</u>

### **Key Facilitators**



Prof Sreekumar & Team IIITDM Kancheepuram



Dr. Masilamani V IIITDM Kancheepuram

Dr. Badri Narayana Patro

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Dr. Ram Prasad Padhy IIITDM Kancheepuram



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#### Contact:

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