

Report on
One Day
Hands on Training
“Computer Vision and Image Processing Fundamentals Using Python and OpenCV”
Organized by
Department of EEE and ECE
in Association with MITS – IETE Students Forum (ISF)
04.10.2025

**MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE**
DEEMED TO BE UNIVERSITY
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Madanapalle - 517325, Annamayya Dist., Andhra Pradesh, India

**IETE TECHNICAL EVENT HANDS ON**
“Computer Vision and Image Processing Fundamentals Using Python and OpenCV”
Organized by
Institute of Electronics and Telecommunication Engineers
in association with
Department of EEE & ECE, MITS DEEMED TO BE UNIVERSITY

Date : 04.10.2025 **Time:** 10:00 AM to 1:30 PM **Venue:** seminar hall - A

Registration Link : <https://forms.gle/BgbHTdvhwFMgU56a8>

**Keynote Speaker**
Dr. P. ANANDAN
Associate Professor,
School of Computer Science and Engineering,
Vellore Institute of Technology, Chennai.

Chief Patron	Patrons	Program Chair	Co - Chair	Convenors	Coordinators	Co-Coordintates
Dr. N. Vijaya Bhaskar Choudary	Mr. N. Dwarakanath Mrs. Keerthi Nadella	Dr. C. Yuvraj	Dr. P. Ramanathan	Dr. A. V. PavanKumar Dr. S. Rajasekaran	Dr. Nehru Kandamany prof. ECE	Mr. Sridhar. N Asst. prof. EEE
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Report Submitted by: Dr Nehru K, Assistant Professor, ECE.

Participants: EEE and ECE Students of MITS Madanapalle.

Venue (College/ Institute): Seminar Hall A-Madanapalle Institute of Technology & Science (MITS), Angallu.

Date & Time: 04.10.2025 & 10.00 am to 1.30 pm.

Organized by: Dr Nehru K, Professor, ECE.
Mr N Sridhar, Assistant Professor, ECE.

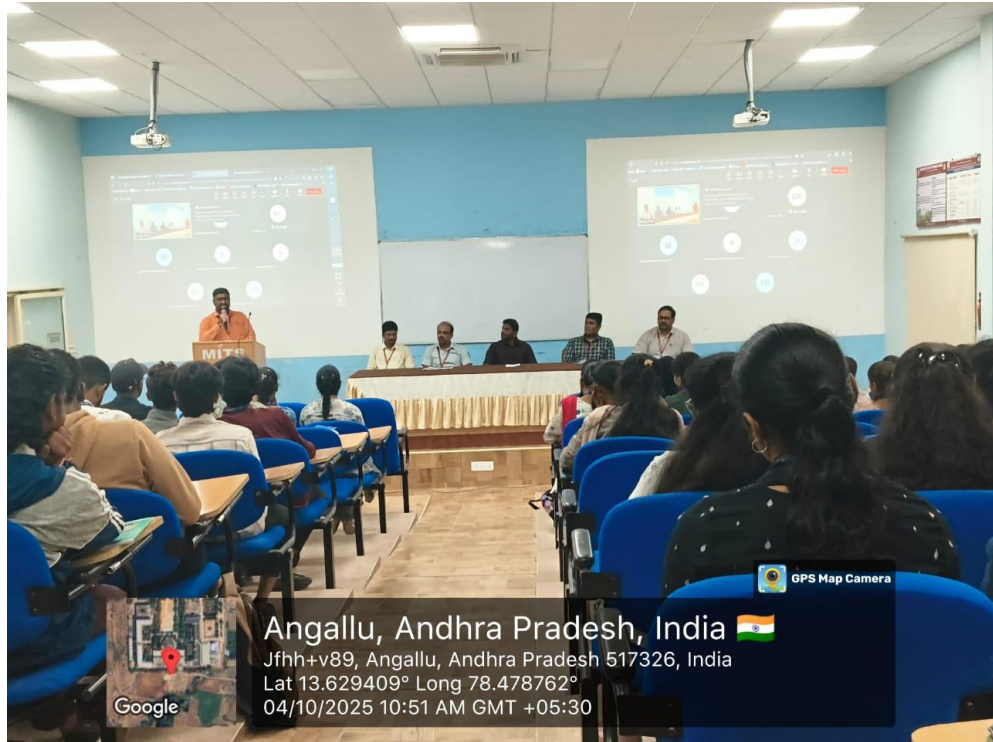
Resource Person Details: Dr P Anandan, Associate Professor, School of computer science and engineering, VIT Chennai.

Important Dignitaries attended/ organized: Dr.P. Ramanathan-Principal
Dr Dipankar Roy -Dean Engineering
Dr. A V Pavan Kumar-HoD/EEE
Dr S Rajasekaran -HoD/ECE

Student Coordinators: G. Thanooj (IV-ECE)
R Madhurima (IV-EEE)
M Tarak Ajay Kumar (IV-CST)

All esteemed guests and dignitaries are cordially invited for the seminar program. After that Dr A V Pavan Kumar HoD/EEE given welcome address followed by Dr. P Ramanathan, Principal, MITS, shared his views about importance of learning technology among students. Dr Dipankar Roy Dean Engineering addressed about future education and skill development among students. Dr.S. Rajasekaran, HoD/ECE, shares information about opportunity towards image processing and python. Finally, Mr N Sridhar gave vote of thanks for providing this wonderful opportunity.









Computer vision's importance lies in enabling machines to interpret visual data, with applications in self-driving cars, medical imaging, and security. Using Python, a popular choice for its extensive libraries like OpenCV, is crucial for its simplicity and power in building and deploying computer vision applications. Fundamentals include understanding concepts like image acquisition, processing, and analysis, and key metrics like intersection over union (IoU) to evaluate model accuracy.

Importance of computer vision:

Revolutionizing industries: It automates tasks in manufacturing, agriculture, and retail, which leads to improved efficiency and cost savings.

Enhancing safety and security: It is vital for self-driving cars to "see" and react to their environment, and it improves security through facial recognition and anomaly detection in surveillance.

Advancing healthcare: It helps medical professionals by enhancing medical scans, enabling early detection of diseases, and aiding in diagnosis.

Improving accessibility: It can assist people with disabilities through applications like image recognition and sign language translation.

Conclusion:

Computer vision uses algorithms to enable computers to interpret and understand the visual world, and Python is a popular language for this field due to its extensive libraries like OpenCV and NumPy. Fundamentals include reading and manipulating images, performing transformations, and feature extraction. Python, combined with libraries, supports both basic operations and advanced applications like object detection, facial recognition, and augmented reality.