



Two Weeks Certification Program on Machine Learning for Computer Vision

February 1st – 12th, 2021
<http://academymnit.wordpress.com>



Chairman, Advisory Board, EICT Academy &
Director MNIT Jaipur
Prof. Udaykumar R. Yaragatti

Honorary Academic Chair, EICT Academy
Prof. V. Sinha

Chief Investigator, EICT Academy
Prof. Vineet Sahula, ECE

Co- Chief Investigators, EICT Academy
Prof. Lava Bhargava, ECE
Prof. Pilli Emmanuel Shubhakar
Dr. C. Periasamy, ECE
Dr. S. J. Nanda, ECE
Head, ECE (Prof. V. Janyani)
Head, CSE

Preamble (Electronics & ICT Academy)
Government of India had announced a National Policy on Skill Development, which has set a target of skilling 500 million people by 2022 in the domain of Electronics & IT. Under the plan scheme of "Digital India Manpower Development". MeitY has set up seven (07) Electronics and ICT Academies as a unit in 03 IITs, 03 NITs and 01 IIIT with an objective of faculty/mentor development/up gradation in the areas related to Electronics & ICT leading ultimately to improved employability of graduates/diploma holders. MNIT Jaipur has set up such an academy for providing specialized training to faculty and industry persons in the states/UTs of Rajasthan, Gujarat, Daman & Diu, Dadra Nagar Haveli.

(A) Issues-

1. IT Hardware and Electronics Manufacturing industry- availability of properly trained, skilled and qualified manpower
2. Number of quality PhDs generated in IT / Computer Science is very low
3. In E & ICT domain- there is a very high degree of obsolescence of existing technologies and faster emergence of newer technologies

(B) Approach-

1. A focused faculty training/updation programme for IT, Electronics and related sectors
2. Spreading up and continuous updation regarding Emerging Technology
3. Training and consultancy services for Industry
4. Design, Develop and Deliver specialized modules for specific research areas and Industry
5. Providing advice and support for technical incubation and entrepreneurial activities

An intensive two-week online certification programme is being organized jointly by PDPM IIITDM Jabalpur, NIT Patna, IIT Guwahati and MNIT Jaipur for the faculty of engineering and technological institutions. It is also open to persons from industry and doctoral students of Indian organizations. This workshop will cover fundamentals of image processing and computer vision (CV), Artificial Intelligence (AI), Machine Learning (ML), Deep Learning (DL) and Convolutional Neural Network (CNN). Eminent experts from IIT/NIT/Industry and prestigious foreign universities would be conducting online lab and training sessions.

Experts/Speakers-

- 1) Prof. Shantanu Chaudhury, Director, IIT Jodhpur
- 2) Professor Barbara Zitova, Academy of Sciences of the Czech Republic
- 3) Professor Hironobu Fujiyoshi, Chubu University, Japan
- 4) Prof. Aparajita Ojha, PDPM IIITDM Jabalpur
- 5) Dr Santosh Viparathi, MNIT Jaipur
- 6) Dr Prithvijit Guha, IIT Guwahati

Course Content:

- 1: Introduction to image processing and computer vision (CV)
- 2: Traditional approaches in CV
- 3: Introduction to Artificial Intelligence (AI) and Machine Learning (ML)
- 4: Applications of ML in Medical Images
- 5: Introduction to deep learning (DL)
- 6: Understanding convolutional neural network (CNN)
- 7: CNN architectures for CV
- 8: Applications of DL in Image Segmentation, and Image Enhancement
- 9: Applications of CNN in Face Recognition

Programme Coordinator:

Dr. Santosh Vipparathi skvipparathi@mnit.ac.in 9549658135 (M)

Registration:

Registration is open to faculty, industry persons, doctoral, postgraduate and graduate students. Participants will be admitted on first-come first-served basis. Register online at - http://www.mnit.ac.in/eict/acad_training_prg.php

Certification Fee:

- Academic (student/faculty): 500/-, Industry/Others: 1000/-
- (A) Fee once paid will not be refunded back; it may be adjusted in future courses upon prior request.
 - (B) The fee covers online participation in the programme, comprehensive tutorials, practice notes & certification charges.
 - (C) The organizers should receive the registration amount through online payment gateway provided at the registration portal.
 - (D) Register here: <http://online.mnit.ac.in/eict/>

→ For any other query, email us at academy@mnit.ac.in