



ONLINE FACULTY DEVELOPMENT PROGRAMME (FDP) ON

Role of Artificial Intelligence for Computer Vision and Medical Imaging Applications
(4th March –12th March 2024)



Organised by

Electronics & ICT Academy, NIT Warangal

In Association With

Department of Electronics and Communication Engineering

Muffakham Jah College of Engineering and Technology, Hyderabad, Telangana

(Sponsored by Ministry of Electronics and Information Technology (MeitY), GOI)

Preamble:

"Electronics & ICT Academy" was set up at NIT Warangal with financial assistance from MeitY, GoI. The jurisdiction of this academy is Telangana, Andhra Pradesh, Karnataka, Goa, Puducherry and Andaman & Nicobar Islands. This academy's role is to offer Faculty Development Programmes in standardized courses and emerging areas of Electronics, Information Communication Technologies, training & consultancy services for Industry, Curriculum development for Industry, CEP for working professionals, Advice and support for technical incubation and entrepreneurial activities.

About the FDP:

This FDP aims at providing strong theoretical background along with practical experience in the field of computer vision and medical imaging applications and how the visualization and analysis of the images could be efficiently done with the help of computer vision and medical image analysis-based algorithms. In the growing and emerging era of "Digital India" initiative, the use of computer vision becomes pertinent in the machine vision and medical imaging area since several applications of the images determine and contribute towards socio-economic status of the regions and the country as whole. Eminent resource persons of CV and Medical Imaging experts would deliver the computer vision and medical imaging-based methods. This FDP aims to impart knowledge and train on fundamentals of engineering aspects of AI and insights in recent computer vision medical image analysis applications using AI. FDP will be helpful for the faculties and researchers working in the areas of AI/ML for computer vision and medical image analysis applications.

Major Course Contents:

- Introduction to Computer Vision and Medical image analysis applications.
- Machine Learning Basics, Working with data pre-processing and data visualization.
- Supervised and unsupervised learning methods, SVM classification, neural networks and applications.
- Introduction to Deep learning methods, and DL based other Architectures and its applications.
- CNN Architectures for CV and medical imaging implementation.
- Video analytics, Object detection/Tracking, segmentation, Yolo models, RCN, Unet and FRCNN.
- Biometrics detection, Human activity and face recognition, Emotion recognition.
- Medical image data processing and analysis.
- AI/ML for Biomedical imaging, CT scan/MRI based image analysis, Fundus imaging and medical image classifications.
- Basics of Tensor Flow/Keras/PyTorch/Jupyter and Colab.
- Working with data pre-processing and data visualization using python/MATLAB.
- Hands-on session using Python/MATLAB.
- CV and AI algorithms implementation on Hardware platform like Jetson Nano, TX2 etc.

Faculty conducting this programme:

The faculty members from NIT Warangal will conduct the programme; Academicians in the concerned field from IITs/NITs/IIITs are invited to deliver lectures in the programme. Speakers from industries are also expected to deliver as part of the course.

Registration Fee Particulars:

Faculty and Research Scholars	Rs.1000/-
Industry Participants	Rs.2250/-

Participants need to pay the Registration Fee Online using the following details

Online Transfer Details	
Account Name:	Electronics & ICT Academy NITW
Account No:	62423775910
IFSC:	SBIN0020149
Bank and Branch:	State Bank of India, NIT(REC) Warangal

How to apply:

Participants are required to fill the online registration form by clicking on the following link:

<https://forms.gle/Fy2cKwEo51ZwSGvR8>

Selection Criteria:

Selection will be done based on first-come-first-serve basis to a maximum number of 60 (sixty). Additionally, 10 participants from industry are allowed to participate. The list of selected participants will be intimated through e-mail. In case a candidate is not selected, the DD will be sent back. Candidates will be issued satisfactory certificates on successful completion of the course. Reservations are followed for selecting candidates as per GOI norms.

Important Dates:

Last date (Application & DD)	01.03.2024
Selection List by E- mail	03.06.2024
Duration	04.03.2024 to 12.03.2024

About NIT Warangal:

National Institute of Technology, Warangal is the first among 17 RECs setup as joint venture of the Government of India and the state government. Over the years, the college has established itself as a premier Institute imparting technical education of a very high standard leading to the B.Tech degrees in various branches of engineering, M.Tech. and Ph.D. programmes in various specializations. All B. Tech and M. Tech programmes of NIT Warangal are NBA accredited.

About MJCET Hyderabad:

MuffakhamJah College of Engineering and Technology (MJCET) was established in the year 1980 and today, it is a premier institute, offering BE Courses in Civil, ECE, CSE, IT, Mechanical and relevant ME Courses. Research Centers has started in five branches and a total of 62 research scholars are pursuing Ph.D from the campus. The college is affiliated to Osmania University, Hyderabad and approved by AICTE. The ECE department was established along with the inception of the institution. Being one of the oldest departments, it has acquired a stable profile with a good blend of experienced and young enthusiastic faculty coupled with state of art infrastructure. It is also a recognized research center of Osmania University for doctoral degree. With a very active IEEE Student Branch and Robotics Club, the department has achieved international and national level awards and trophies.



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1. Name :

2. Designation :

3. Institution :

4. Email :

5. Mobile No :

6.

Reference No:

Amount:

Bank :

Date:

7. Address for Correspondence:

8. Educational Qualification:

9. Subjects taught so far:

10. No. of refresher courses/workshops attended:

11. Experience (in years):

Teaching: Research:

Industry:

12. Do you belong to SC/ST : YES /NO

Declaration

The information provided is true to the best of my knowledge. If selected, I agree to abide by the rules and regulations of the FDP and shall attend the course for the entire duration. I also undertake the responsibility to inform the Coordinator in case, I am unable to attend the course.

Date

Signature of the Applicant

SPONSORSHIP CERTIFICATE

Dr. /Mr. /Ms. is an employee of our Institute/Organization and is hereby sponsored to participate in the FDP on "**Role of Artificial Intelligence for Computer Vision and Medical Imaging Applications**", sponsored by **Electronics & ICT Academy** during **4th March-12th March 2024** at Muffakham Jah College of Engineering and Technology, Hyderabad, Telangana.

Signature of Head of Institution
(with seal)

Address for correspondence

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Mobile: +919959129564

Email: ayeshanaaz@mjclege.ac.in

It is requested to all the delegates, after completion of application form, all the payment details, screenshot of the payment and scanned application form has to be uploaded in the following online registration link.

Registration Link:

For more details about Electronics & ICT Academy, NIT, Warangal, please visit:

<https://nitw.ac.in/eict>

For more enquiries, please contact:

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Coordinators

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