



ONLINE FACULTY DEVELOPMENT PROGRAMME (FDP) ON

AI & Machine Learning for Computer Vision Applications

(1st December – 8th December 2021)

Organised by

Electronics & ICT Academy, NIT Warangal

in association with

Shri Ramdeobaba College of Engineering and Management, Nagpur

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

RCOEM

Shri Ramdeobaba College of
Engineering and Management, Nagpur

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:

The FDP on AI & Machine Learning for Computer Vision Applications Focuses on providing an introduction on the impacts of Deep learning and Artificial Intelligence for CV applications. The FDP will help to disseminate the knowledge in the domain of computer vision, ML and Deep learning. It empowers the participants to understand how AI/ML, data science can be used to innovate and improve the business process. AI techniques are widely used for many applications such as Biometrics, Medical Imaging Processing, Natural Language Processing, and so on. This course will give the basics of AI concepts with applications to computer vision. It will help to upgrade the expertise and capabilities of the faculty members of various engineering institutions in India. Experts cover a range of contemporary computing topics and provide with a strong theoretical basis, as well as develop critical analysis and practical skills. This FDP brings you a taste of technology and generate a quick start interest to work with future technologies.

Major Course Contents:

- Introduction to Trends and State-of Arts implementation for Computer Vision applications
- Introduction to Artificial Intelligence, Machine Learning, Deep Learning, Representation Learning
- Machine Learning Basics, Working with data pre-processing and data visualization using python.
- Deep Learning Regularization Techniques: L1, L2, Noise Injection, Data Augmentation, Dropout, Ensemble, Parameter Sharing, etc.
- Basics of Tensor Flow/Keras/PyTorch
- CNN Architectures for CV implementation.
- Deep learning based other Architectures
- Object detection/Tracking Yolo, RCN and FRCNN
- Computer Vision Applications: Image Classification, Object Recognition and detection using Tensor Flow/ PyTorch
- Image Segmentation , UNET, RNN Architecture and LSTM
- Computer vision and AI algorithms implementation on Hardware platform like Jetson Nano, TX2 etc.
- Biometrics detection, biomedical imaging, Action Recognition and Multi-view activity recognition using Deep Learning in MATLAB /Python
- Hands-on Session using Python / MATLAB
- Current Research – Latest Architectures, Transformer etc.

Faculty conducting this programme:

The programme will be conducted by the faculty members from NIT Warangal; 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.750/-
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/C5VHEiDUGZwJ4yq96>

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)	22.11.2021
Selection List by E- mail	26.11.2021
Duration	01.12.2021 to 08.12.2021

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 RCOEM, Nagpur

Shri Ramdeobaba College of Engineering and Management, Nagpur was established in 1984, Shri Ramdeobaba College of Engineering and Management is the educational institution offering 30 undergraduate and postgraduate engineering courses. It is located at Gittikhadan of Nagpur. The college has been accredited with "A" grade provided by National Assessment and Accreditation Council. College has secured 119th position in India based on the NIRF 2021 Ranking. The college has been affiliated to Rashtrasant Tukadoji Maharaj Nagpur University. The college has collaborated with international universities such as University of Florida USA, University of Massachusetts Lowell USA, Rochester Institute of Technology USA, etc.



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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 **“AI & Machine Learning for Computer Vision Applications”**, sponsored by **Electronics & ICT Academy** during **1st December – 8th December, 2021** at Shri Ramdeobaba College of Engineering and Management, Nagpur.

Signature of Head of Institution
(with seal)

Address for correspondence

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Mobile: +919423407300
Email: kenejd@rknc.edu

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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