

ONLINE FACULTY DEVELOPMENT PROGRAMME (FDP) ON Recent Trends in Medical Image Processing and

Computer vision

(8th November – 17th November 2021)

Organised by

Electronics & ICT Academy, NIT Warangal

in association with

Yeshwantrao Chavan College of Engineering (Autonomous), Nagpur (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:

The Faculty Development Programme will help to disseminate the knowledge in the domain of AI and Machine learning. It empowers the participants to understand how ML can be used to innovate and improve the medical image process and Computer Vision Applications. Machine Learning is a fastgrowing field of Artificial Intelligence concerned with the study and design of computer algorithms for learning good representations of data, at multiple levels of abstraction. Since data is overwhelming, organizations are struggling to extract the powerful insights they need to make smarter business decisions. The participants will be trained with hands-on approach in order to have an in-depth insight into the domain of ML and expose them to Feasibility & future scope

Major Course Contents:

- Introduction to Artificial Intelligence, Machine Learning, Deep Learning and Representation Learning
- Machine Learning Applications
- Feature Representations
- Ensemble Methods
- Machine Learning Basics Linear Regression, Perceptron's, Multilayer Perceptron's, Stochastic Gradient Descent, Backpropagation
- Python Programming
- Decision Trees, Naïve Bayesian Classification, KNN
- Unsupervised methods, K-means clustering
- Support Vector Machines
- Dimensionality Reduction (PCA)
- Optimization Methods
- Metaheuristics Methods
- Medical data classification and ECG and EEG data classification. Segmentation
- Brain Image Analysis, Neuroimaging, Xray Imaging
- Autoencoders for Computer Vision Applications
- Computer Vision Applications: Image Classification, Object Recognition and detection
- Current Research Latest Architectures, Applications

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/mU8opVbtn8uxNoGx9

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)	6.11.2021
Selection List by E- mail	7.11.2021
Duration	8.11.2021 to 17.11.2021

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 YCCE:

Yeshwantrao Chavan College of Engineering was established in the year 1984 by Nagar Yuwak Shikshan Sanstha, Nagpur. YCCE is a prominent institution acknowledged for remarkable engineering education and research. Since 35 years the institution has magnificently cherished and encouraged the forthcoming engineering professionals across the country making us one of the most opted engineering colleges in Maharashtra. The college is guided by the Academic Advisory Board consisting of eminent academicians from the prestigious technical institutes in India and USA. YCCE is one of the top engineering colleges in Nagpur that aspires to create devoted, proficient, capable, and resourceful engineers who would utilize their assimilated knowledge and skills for the advancement of the organization as well as the Nation. It is the first private engineering college in Central India to acquire "Autonomous Status". The institute is awarded with 'A' Grade of by NAAC for a period of five years 2016-2021.





ONLINE FACULTY DEVELOPMENT PROGRAMME (FDP) ON Recent Trends in Medical Image Processing and



Computer vision (8th November - 17th November 2021) Organised by Electronics & ICT Academy, NIT Warangal in association with

Yeshwantrao Chavan College of Engineering (Autonomous), Nagpur (Sponsored by Ministry of Electronics and Information Technology (MeitY), GOI)

- 1. Name :
- 2. Designation
- Institution
- 4. Email
- 5. Mobile No :

F

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

(If yes, please specify and attach a copy of caste certificate to claim the concession)

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

Coordinators

Dr. M. Srinivas

Ph.D. (IITH), Post-Doc (Academia Sinica, Taiwan and ETS, Canada) Computer Science and Engineering NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL – 506 004 (Telangana State) Email: msv@nitw.ac.in Ph. No: 08897064421

SPONSORSHIP CERTIFICATE

Dr. /Mr. /Ms. is an employee of our Institute/Organization and is hereby sponsored to participate in the FDP on **"Recent Trends** in Medical Image Processing and Computer Vision", sponsored by Electronics & ICT Academy during 8th November – 17th November, 2021 at Yeshwantrao Chavan College of Engineering, Nagpur.

Signature of Head of Institution (with seal)

Address for correspondence

Post your application form **Dr. Ujwalla Gawande** Department of Information Technology Yeshwantrao Chavan College of Engineering, Hingna Road, Wanadongri, Nagpur, Maharashtra, INDIA- 441110

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

For more enquiries please contact:

Dr. Ujwalla Gawande Mobile: +91 9822909287 Email: ujwallgawande@yahoo.co.in

Dr. Ujwalla Gawande

Department of Information Technology, Yeshwantrao Chavan College of Engineering, Hingna Road, Wanadongri, Nagpur, Maharashtra, India – 441110 Email: <u>ujwallgawande@yahoo.co.in</u> Ph. No: +91 9822909287