



FACULTY DEVELOPMENT PROGRAMME (FDP) ON

COMPUTER VISION AND IMAGE PROCESSING (CVIP)

(4th December – 9th December, 2017)

Organized by

CMR Technical Campus, Hyderabad

in association with

National Institute of Technology, Warangal.

Under the Scheme of Electronics & ICT Academy

(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, Govt. The jurisdiction of this academy is Telangana, Andhra Pradesh, Karnataka, Goa, Puducherry and Andaman & Nicobar Islands. This academy 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.

Computer Vision tries to do what a human brain does with the retinal data that means understanding the scene based on image data. That mainly involves segmentation, recognition and reconstruction (3D) and these works together to give us the scene understanding. Computer Vision employs image Processing and Machine learning as well as some of the other mathematical methods to do the mentioned tasks. However, Image processing, is mainly focused on processing raw images without giving any knowledge feedback on them. For example if you want to do a semantic image segmentation (A computer vision task) you might apply some filtering on the image during the process (an image processing task) or try to recognize the objects in the scene (a machine learning task). This FDP aims at providing strong theoretical background along with practical experience in the field of CV&IP and how the visualization and analysis of the images could be efficiently done with the help of image processing tools. In the growing and emerging era of "Digital India" initiative, the use of digital image processing becomes pertinent in the Image Processing area since several applications of the images determine and contribute towards socio-economic status of the regions and the country as whole. The image processing tools would be delivered by eminent resource persons of image processing experts.

Major Course Contents:

- Fundamental of IP (in spatial and Frequency domain).
- Object Tracking
- PSO assisted Kalman Filtering for object Tracking.
- Image Processing in Big Data.
- Digital Image Filtering
- Segmentation and Object Localization.
- Classical to soft computing Approaches.
- Detection of temporal discontinuities in video sequences.
- Deep Neural Networks for detection of temporal discontinuities.
- Hardware Design accepts for machine learning algorithms.
- Hardware implementation of face recognition system
- Installation of Hadoop, SPARK clusters and integrating them with MATLAB for text and Image Processing
- Hands-on Experiences.

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 from Telangana, Andhra Pradesh, Karnataka, Puducherry, Andaman and Nicobar Islands, Goa	Rs. 2500/-
Faculty of SC/ST Category from Telangana, Andhra Pradesh, Karnataka, Puducherry, Andaman and Nicobar Islands, Goa	Rs. 1250/- (SC/ ST participants should submit the copy of their caste certificate to claim the concession along with application form)
Industry Participants	Rs. 7500/-
Participants from other states	Rs. 8500/-

SC/ST concession is only for faculty of mentioned states. Research Scholars are not eligible for SC/ST concession.

The participants need to send a crossed demand draft (DD) drawn in favor of "Director, NIT Warangal" and payable at SBH, NIT Warangal branch.

Eligibility:

The programme is open to the teachers of Engineering Colleges, MCA Colleges and other allied disciplines in Telangana, Andhra Pradesh, Karnataka, Goa, Puducherry, Andaman and Nicobar Islands. Industry personnel working in the concerned /allied discipline can also attend.

Accommodation:

All the selected participants will be provided FREE boarding & lodging in the institute College Hostel. No TA will be paid for the participants.

How to apply:

A filled in form of application in the prescribed format duly signed and sponsored by appropriate authorities (along with demand draft) should reach the coordinator by speed-post. It is also mandatory to send scanned application form and demand draft through e-mail to ravikumar@nitw.ac.in and srikanth.cmrtc@gmail.com as selection will be intimated only through mail.

Selection Criteria:

Selection will be done based on first-come-first-serve basis to a maximum number of 50 (fifty). 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 certificates on successful completion of the course. Reservations are followed for selecting candidates as per GOI norms.

Important dates:

Last date (Application & DD)	25 – 11 - 2017
Selection List by E- mail	28 – 11 - 2017
Duration	4 th – 9 th December, 2017

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 programs in various specializations. All B. Tech and M. Tech programmes of NIT Warangal are NBA accredited.

About CMR Technical Campus, Hyderabad:

CMR Technical Campus has been structured to take a quantum leap on the changing trends of technology. The Campus is accredited by NBA in the year 2014. The need of setting up the college emerged when no other college could fulfill the aspirations of a student in his/her endeavor to acquire wholesome education. The very strength of CMR Technical Campus lies in its principles of providing the right learning environment for the student who does not have to compromise throughout the learning process of becoming global citizen. Over the years since it has been established, there has been dynamic progress at CMRTC in all academic and research activities, and a spectacular improvement in facilities and infrastructure, to keep it on par with the best institutions in India. The campus epitomizes the Technical Campus motto, "Learning and Exploring" in providing the best of infrastructure and ambience. CMR Technical Campus keeps abreast of the global situation.



APPLICATION FORM

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(4th December – 9th December, 2017)

Organized by

CMR Technical Campus, Hyderabad

in association with

E & ICT Academy, NIT Warangal.

1. Name :

2. Designation :

3. Institution :

4. Email :

5. DD No: Bank: Date:

Amount:

6. Address for Correspondence:

7. Educational Qualification:

8. Subjects taught so far:

9. No. of refresher courses/workshops attended:

10. Experience (in years):

Teaching: Research: Industry:

11. Accommodation required: YES / NO

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.

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 “**Computer Vision & Image Processing**”, sponsored by Electronics & ICT Academy during 4th – 9th December, 2017 at CMR Technical Campus, Hyderabad

Signature of Head of Institution
(with seal)

Address for correspondence

Post your application form with DD to

Prof.G.Srikanth

Professor & Head, ECED

CMR Technical Campus,

Hyderabad.-501401,

Telangana State, India.

E-mail the scanned copies of filled-in and duly signed application form along with DD to

srikanth.cmrtc@gmail.com

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

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

For more enquiries please contact:

Mobile: 0 8332969363, 9248727226

Land line: 0870-2462444

Coordinators

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