

COMPUTER VISION & BIOMETRICS LAB



ORGANISING

24th
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30th
2019

IEEE Signal Processing Society Meeting
on

ADVANCES IN
DEEP ARCHITECTURES FOR
SIGNAL, IMAGE & VISION APPLICATIONS



SPONSORS



INDIAN INSTITUTE OF INFORMATION TECHNOLOGY—ALLAHABAD

ABOUT THE WORKSHOP & SUMMER SCHOOL

Deep architectures are playing the most important role in the area of machine learning and are considered as the future technology and anticipated a complete paradigm shift in the area of artificial intelligence by the researchers. It is considered to be one of the most active areas of research in signal, image, vision and biometrics and comprises of supervised and unsupervised models of approach for detection/ recognition/classification/ synthesization of objects.

With the advent of extraordinary computation power and huge data sets, it is possible to model the most complex processes using deep architectures. With the advent of Deep learning architectures, almost all areas of signal processing have undergone significant changes in their approach. This is primarily because machine learning is at the forefront of solving many problems in computer signal, image, vision and biometrics which were thought to be either unsolvable or highly computationally intensive in the past. One of the key ideas which have facilitated this is the introduction of deep architectures, which form the basis of present day pattern based recognition problems.

The proposed one-week course will be comprising of approximately 25 lectures followed by 15 hours' worth of lab demonstration and hands-on approach is intended to help the participants familiarise themselves with Signal & Image Processing, Computer Vision, Biometrics and Machine Learning and pertains to how all of the approaches can be applied to research problems in real life. The course also covers essentials of machine learning, deep neural networks as well as the other models how they can be applied to solve practical problems in computer vision so that more people become interested in signal processing.



OBJECTIVES

- P**roviding a platform to showcase the research work through the Technical paper and poster presentation
- B**uilding awareness towards deep learning architectures.
- B**uilding the technical capacity in the area of Signal, Image, and Vision Processing via deep architectures.
- B**uilding communities of research students, educator, R&D, and Industry persons in this emerging area of research and development.
- P**roviding hands-on tutorial sessions, where the participants can experiment with concepts and methods



Prof. Bidyut B. Chaudhuri
ISI, Kolkata



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IIIT-Allahabad



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Senior Application Engineer,
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IIIT - Sri City



Dr. Krishna Pratap Singh
IIIT Allahabad



Dr. Satish Kumar Singh
IIIT-Allahabad



PRE-DEEP LEARNING CLASSIFICATION ARCHITECTURES
ESSENTIALS OF TRADITIONAL NEURAL NETWORKS
CONVOLUTIONAL NEURAL NETWORK ARCHITECTURES
TRAINING METHODS FOR CNN
TRANSFER LEARNING
ADVANCED DEEP CNN ARCHITECTURES
NETWORK IN NETWORK
DEEP NETWORKS WITH STOCHASTIC DEPTH
DENSENET, RESNEXT
OBJECT DETECTION USING CNN
VISUALIZING AND UNDERSTANDING CNN
DEEP GENERATIVE MODELS
ACTION RECOGNITION
3D MODELLING
DEEP REINFORCEMENT LEARNING

CHIEF PATRON & CHAIRPERSON



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CONVENER



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COORDINATOR



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CATEGORY	COURSE FEE	
	INDIAN	ABROAD
Full-time Research Scholars/Student	INR. 5,000/. + 18% (GST)	USD. 120/. + 18% (GST)
Faculty Members	INR. 6,000/. + 18% (GST)	USD. 180/. + 18% (GST)
Industry Person	INR. 7,000/. + 18% (GST)	USD. 240/. + 18% (GST)

- + Accommodation and Food Facilities at nominal fee at the institute rate can be made available to the participants on Payment basis.
- + Food and Accommodation charges will be informed soon.
- + No TA/DA will be given from the institute

PAYMENT DETAILS

- + Details regarding payment of registration fees will be communicated to the selected participants through email at the earliest.
- + Confirmation mail will be sent to the interested applicants only after receiving the payment details.
- + Selection will be done on first come first serve basis and motivation of the candidate in addition to good recommendation.

HOW TO REGISTER?

Visit <https://cvbl.iita.ac.in/adasiva2019/> to register.

LAST DATE OF REGISTRATION: May 30, 2019

CONTACT US

CONVENER

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FOR ANY QUERIES

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