COMPUTER VISION & BIOMETRICS LAB

ORGANIZING

TWO WEEKS

14th-28th July, 2018

NATIONAL WORKSHOP & SUMMER SCHOOL ON

ADVANCES IN

DEEP ARCHITECTURES

FOR

SIGNAL **IMAGE** **VISION**

APPLICATIONS

DEPARTMENT OF INFORMATION TECHNOLOGY

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 two-week course will be comprising of approximately 40 lectures followed by 14 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

⇒   Providing a platform to showcase the research work through the Technical paper and poster presentation

⇒   Building awareness towards deep learning architectures.

⇒   Building the technical capacity in the area of Signal, Image, and Vision Processing via deep architectures.

⇒   Building communities of research students, educator, R&D, and Industry persons in this emerging area of research and development.

⇒   Providing hands-on tutorial sessions, where the participants can experiment with concepts and methods

⇒   Introducing the importance of terahertz imaging and communication.

Prof. Bidyut B. Chaudhuri
ISI, Kolkata

Prof. P. Nagabhushan
IIIT-Allahabad

Dr. R. Venkatesh Babu
IISc Bangalore

Dr. Vineeth N. B.
IIT - Hyderabad

Dr. Mukesh Jewariya
NPL, CSIR

Dr. Balasubryamanian Raman
IIT Roorkee

Dr. Chetan Arora
IIIT - Delhi

Mr. Akhilesh Kumar
DIPR, DRDO, GoI, New Delhi

Dr. Gaurav Agrawal
Ola, ANI Tech. Pvt. Ltd. Bangalore

Dr. Angshul Majumdar
IIIT Delhi

Dr. Partha Pratim Roy
IIT Roorkee

Dr. Tejas Kulkarni
Google DeepMind

Prof. Shekhar Verma
IIIT-Allahabad

Mr. Mohak Sukhwan
ABB Robotics Bangalore

Dr. Shiv Ram Dubey
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

Special Session on Terahertz Imaging and Communication

Dr. Mukesh Jewariya

Scientist

Length, Dimension and Nanometrology

National Physical Laboratory (NPL), CSIR

CATEGORY	COURSE FEE	
	INDIAN	ABROAD
Full-time Research Scholars/Student	INR. 7000/. + 18% (GST)	USD. 250/. + 18% (GST)
Faculty Members	INR. 10,000/. + 18% (GST)	USD. 350/. + 18% (GST)
Industry Person	INR. 13,000/. + 18% (GST)	USD. 500/. + 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.

+ Final selection list will be displayed on **June 1, 2018** on the official website.

+ 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.iiita.ac.in/adasiva2018/ to register.

LAST DATE TO REGISTER : May 31st, 2018

CHIEF PATRON & CHAIRPERSON

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Director
IIIT-Allahabad

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CONTACT US

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FOR ANY QUERIES

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