INDIAN INSTITUTE OF INFORMATION TECHNOLOGY ALLAHABAD

COMPUTER VISION & BIOMETRICS LABORATORY

In Association With

IEEE Signal Processing Society

organizes

One-Week

PROJECT ON ADVANCED BIOMETRIC SIGNAL PROCESSING TECHNIQUES

October 23–28, 2021

(Online Mode)

ABOUT THE SHORT TERM COURSE

The short term course on Advances in Biometrics is intended to provide an advanced level understanding of Machine Learning and Deep Learning based methods being developed and used for effective biometrics recognition using various modalities, i.e. Face, Iris, Retina, Hand & Palm, etc. The course will also uncover the problem of deliberate occlusion under covid like scenarios where biometric recognition is necessary with forcing the subjects to remove the face masks and maintaining the ease of collectability of the facial biometric. Few lectures and hands-on shall be dedicated to such algorithms and methods. The course will also cover topics that are very appropriate under low light or no light biometric recognition which is primarily the concern in surveillance applications. So the course will provide some theoretical as well as hands-on exposure to Thermal and Infrared facial biometric recognition. So overall the course will consist of 15 lectures each of 50 minutes followed by questions and discussions for 10 minutes. The course will also conduct 5 hands-on sessions of 2 hours each. The hands-on shall be conducted using online platforms like Google Colab.

TOPICS TO BE COVERED

Introduction to Biometrics, Chronological Development

The problem of Facial Occlusion in Recognition , Occlusion Removal and Face Reconstruction

Periocular Biometrics

The problem of Low-Light or No-Light in Facial Biometrics

Thermal and NIR Face Recognition

Thermal/NIR to Visible Biometric Image Translation and Recognition

Advanced Biometrics, Anti-spoofing, Deep Learning in Biometrics, Etc.

REGISTRATION DETAILS

It is an online self-sponsored short term course and the registration fee is greatly reduced. For the registration, please fill the following form https://forms.gle/6LGRSiB7Z5ixxi5Q6. Account details are given in the registration form for the fee payment.

Category	Fee in $	Equivalent Fee in Rs.
IEEE SPS Professional Members	$15	Rs. 1080
IEEE SPS Student	$7.5	Rs. 540
Other Professional Members	$30	Rs. 2160
Other Students	$15	Rs. 1080

⇒ The objective topic-wise assessment of the course is proposed and the participants and opt for the assessment voluntarily. The top-5 scorers shall be awarded the certificate of excellence and some cash prize.

⇒ Two general research problems shall be floated among the participants and proposed solutions ideas shall be invited. These will be judged and the best Ideas shall be provided with cash prizes and certificates.

CHAIR & CHIEF PATRON

Prof. P. Nagabhushan
Director, IIIT Allahabad

RESOURCE PERSONS

(Alphabetical Order)

Dr. Ajita Rattani
Wichita State University, USA

Dr. Anamika Jain
Centre for Advanced Studies, Lucknow

Dr. Anjali Gautam
IIIT Allahabad

Dr. Balasubramanian Raman
IIT Roorkee

Dr. Kiran Raja
NTNU, Norway

Dr. Mohammad Javed
IIIT Allahabad

Dr. Navjot Singh
IIIT Allahabad

Dr. Pritee Khanna
IIITDM Jabalpur

Dr. Sanjay Kumar Singh
IIT-BHU Varanasi

Dr. Satish Kumar Singh
IIIT Allahabad

Dr. Shiv Ram Dubey
IIIT Allahabad

Dr. Soumendu Chakraborty
IIIT Lucknow

Dr. Subrahmanyam Murala
IIT Ropar

Dr. Surya Prakash
IIT Indore

* Most of the speakers are confirmed

CONTACT

Organizer

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Visit **https://cvbl.iiita.ac.in/** for the details and updates of CVB Lab.