NATIONAL INSTITUTE OF TECHNOLOGY
ARUNACHAL PRADESH

Workshop on

Digital Image Processing and its Applications

(DIPA-2020)

24th to 28th August 2020

Venue

Google Meet

https://meet.google.com/xxy-pxtv-uqs

Sponsored By

TEQIP – III

Technical Education Quality Improvement Programme

Patron

Professor Pinakeswar Mahanta

Director, NIT Arunachal Pradesh

Convener

Dr. Deepak Gupta

Co-Ordinator

- Dr. Koj Sambyo
- Dr. Swarnendu Kumar Chakraborty
- Dr. Subhasish Banerjee
- Dr. Rajat Subhra Goswami
- Dr. Manash Pratim Dutta
- Dr. Biri Arun
- Dr. Achyuth Sarkar
- Mr. Sunit Kumar Nandi

Schedule

Day	Time 10.00 AM - 11.30 AM	Time 11.30 AM – 12.00 Noon	Time 12.00 Noon - 1.30 PM
24/08/2020	*Session 1*	Break	*Session 2*
25/08/2020	*Session 3*	Break	*Session 4*
26/08/2020	*Session 5*	Break	*Session 6*
27/08/2020	*Session 7*	Break	*Session 8*
28/08/2020	*Session 9*	Break	*Session 10*

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(24th August to 28th August 2020)

Organized by

Department of Computer Science & Engineering, National Institute of Technology Arunachal Pradesh

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About the Institute

The National Institute of Technology, Arunachal Pradesh was inaugurated on 18th August, 2010 as a member of a group of ten new NITs. These new NITs were established as centers of excellence in technical education to combat the growing need of technological professionals in India as well as in the World. The Institute has been through many trials since its establishment in 2010; but ultimately has triumphed over all challenges and is thriving today with more than 700 students on roll and many distinguished members of faculty as well as a good many numbers of competent administrative personnel. The vision is to impart quality technical education with strong underpinning of sound knowledge in the domain. Our approach is interactive, informative, innovative and quintessentially holistic. Our main goal is to produce imaginative entrepreneurs, technology leaders of the new millennium and researchers with a profound sense of humanistic and ethical values. The mission is that of producing such Technical Engineers who will not run after jobs , but for whom jobs will run after them, and such that they will create employment and develop new technologies for a faster, sustainable and inclusive growth.

ABOUT ARUNACHAL

If someone is seeking to step into a world of extraordinary beauty and discover experiences found nowhere else on earth, *Arunachal Pradesh* is the right place to step in. The state is inhabited by 26 major tribes and over 100 sub-tribes. Over 500 varieties of orchids are found here. Arunachal Pradesh is also known as the "*Land of the Rising Sun*". *Land of the Dawn -Lit Mountains* is the sobriquet for the state & also known as the *Orchid State of India* or the *Paradise of the Botanists*. Geographically, it is the largest of the North-eastern states known as the Seven Sister States.

Objective of Workshop

- Train the participants with the theoretical concepts of the pattern recognition techniques with main emphasize to EEG applications.
- Understanding of various state-of-art techniques in image/ signal analysis.
- Training on the development of pattern recognition and image analysis algorithms.
- Knowledge and hands-on training of various software for pattern recognition and image analysis.
- Introduce real life applications of the pattern recognition and image analysis.
- Training of the faculty and researcher with recent developments in pattern recognition in industries.

Registration Process and Fees

The participants can register online at https://docs.google.com/forms/d/1gSbu_NjoRQ_gLvH375qZ71KgGrL2PAn7MhMimg92iyk/edit or can use registration form available in this brochure.

Registration Fee:

Students/ Research scholars	**Rs. 50/-**
Institute/ College Teachers	**Rs. 100/-**
Delegates from industries	**Rs. 500/-**

The registration fee should be paid online to:
"NITAP Account" payable at Axis Bank Naharlagun
A/C No: 919010005770836
IFSC: UTIB000379
Type: Savings
(kindly save the receipt or take screenshot of the payment and send a copy via email to datasciencenitap@gmail.com **).**

Participants

- This workshop is specifically designed for industry professional, faculty, PhD, M.Tech and B.Tech student.

Resource Persons

- Lectures will be delivered by eminent academicians from reputed institutions like IITs/NITs/CUs. A few experts may be invited from Industries and R&D laboratories.

Topics to be covered

- Spatial and frequency methods.
- Frequency domain image enhancements filtering, lowpass, highpass.
- FT, use of FT, fast FT.
- Applications of wavelets in image processing.
- Introduction to various feature extraction techniques in image and video.
- Introduction to various dimensionality reduction techniques with recent state of art techniques.
- Few benchmark problems of pattern recognition in image analysis.
- Introduction to Deep Learning .
- Introduction to Brain Computer Interface .
- BCI- Feature Extraction and Classification .