Patron:

Prof. (Dr.) Goutam Sutradhar

Director, NIT Manipur

Conveners:

Dr. Prakash Choudhary
HOD, Computer Science and Engineering

Dr. Kh. Manglem Singh

Dr. KhelchndraThongam

Dr. Y. JinaChanu

Members:

Dr. Khundrakpam Johnson Singh

Ms. Chingakham Neeta Devi

Mrs. AnuradhaLaishram

Ms. TeressaLongjam

Mr. Sanabam Bineshwor Singh

Mrs. Maibam Mangalleibi Chanu

Mr. Saikya Khundrakpam

Mrs. Kshetrimayum Merina Devi

Ms. Nirvana Thokchom

Mr. Panthoi Meetei

Ms. Sanasam Renubala Devi

NIT Manipur Location

The Institute has two campus (Permanent and temporary). Permanent campuses is located at Langol Lamphel and Temporary at Takyel. Both the campuses are around 4-6 km from airport and within 3km from bus stand.

By Air

Imphal is the second largest airport in the North East region with air connectivity to KOLKATA, NEW DELHI, GUWAHATI, AIZAWL& SILCHAR by Air services. Daily flights are available form Delhi, Kolkata and Guwahati with more than 3 flights daily.

Keynote Speakers:

- Prof. D. K. Lobiyal
  School of computer and Systems Sciences, JNU, Delhi

- Prof. Ujjwal Bhattacharya
  Indian Stasistical Institute Kolkata

- Dr. Nilanjan Dey
  Techno India College of Technology, Kolkata

- Prof. Rishi Pal Singh
  HOD, CSE Department, GJUS&T, Hisar

- Dr. Prakash Choudhary
  NIT Manipur

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A FIVE-DAY WORKSHOP

on

COMPUTER VISION AND IMAGE PROCESSING
01-05 DECEMBER, 2018

Sponsored by:

Technical Education Quality Improvement Program – III

Organized by:

Dept. of Computer Science and Engineering

National Institute of Technology Manipur

Imphal - 795001

INDIA

ABOUT THE INSTITUTE

National Institute of Technology Manipur, a centrally funded institution is set up to impart quality technical education at various levels of higher learning. It is one of the ten new NITs established and developed as Institute of National Importance by an act of Parliament. NIT Manipur started its first session with the three branches of Engineering – Computer Science & Engineering, Electrical and Electronic Engineering, Electronics and Communication Engineering. The functioning of institute was started at its temporary Campus at Takyelpat, Imphal under the mentorship of NIT Agartala. The Institute has acquired 138.2 hectare of land in the lush green area of Langol, Imphal and started its functioning at its permanent campus since 2014. This Institute has now 5 branches of Engineering viz CSE, EEE, ECE, Civil, Mechanical and Basic Science and Humanities Department and open courses on B.Tech., M.Tech., M.Sc. and Ph.D.

About the Department

The Department of Computer Science and Engineering,which started in 2010, has qualified and devoted faculty members. Presently the department offers B.Tech, M.Tech and Ph.D. programmes. The departmental research is focused in Image Processing, Computer Vision, Deep Learning,Pattern Recognition,Information Security, and Artificial Intelligence & Robotics. The department has the state of the art laboratory and research facilities. There are currently 18 research scholars pursuing Doctoral programme in CSE.

Pre-requisite Knowledge

- Knowledge of any programming language (basics of python is desirable)
- Basic knowledge of neural network
- Basics of image processing (Segmentation, classification)
- Dedicated to work in the field of computer vision and image processing

Methodologies

The workshop will orient the participants to the in-depth knowledge of medical image analysis and natural image processing along with their applications in a practical way. The workshop will be based on the applications of image processing, machine learning and deep learning in computer vision and hands-on training for object detection, object segmentation, classification and retrieval of images using Python. By the end of this workshop, the participants will become meticulously aware of image processing techniques, machine learning techniques and deep learning techniques that can be applied for computer vision tasks and will have set of algorithms which they will be able to apply to their applications and data sets.

Topics to be covered

Medical Image:

- Medical image processing
- Computer-aided diagnosis (CADx)
- Computer-aided detection (CADe)
- Qualitative analysis and visual detection of the objects
- Quantitative analyses of objects for boundary delineation
- Automatic detection and classification the objects using signal processing, medical image analysis and technologies

Natural Image (object and scene Image)

- Feature learning for image Classification and image segmentation
- Object detection
- Object recognition
- Segmentation of objects
- Natural language processing and image metadata analysis
- Object Identification and its labeling
- Automatic image annotation
- Automatic caption generation
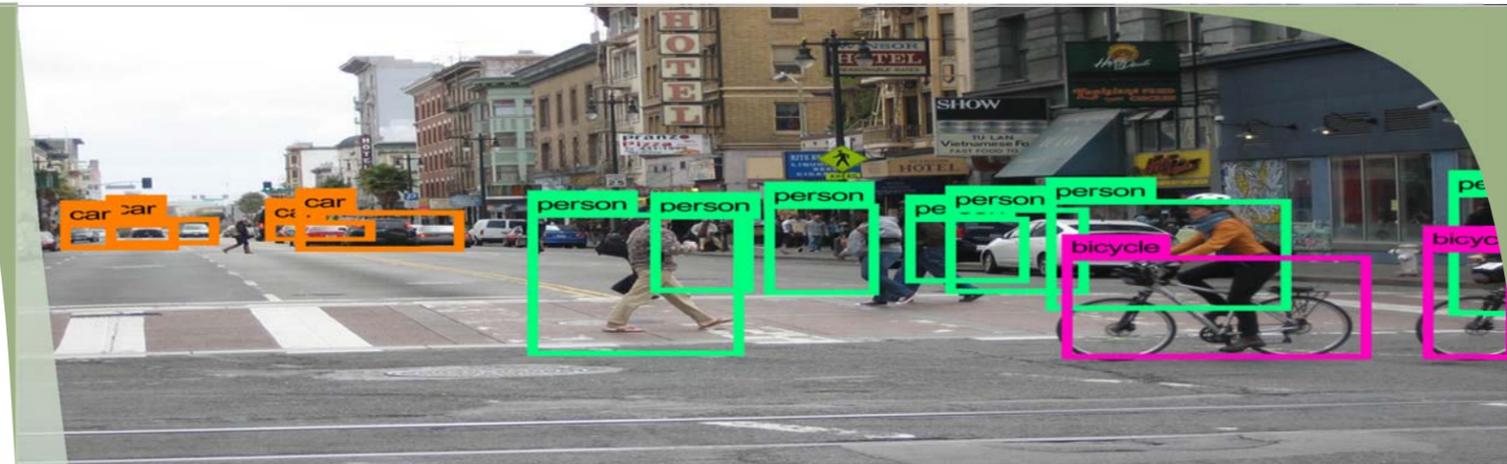
Intended participants are
UG/PG students, research scholars, Ph.D. students, faculty and professionals

Important dates/deadlines

- Registrant Start: 27/11/2018
- Last date of registration: 01/12/2018
- Workshop first day: 01/12/2018
- Workshop last day: 05/12/2018
- Certificate distribution: 05/12/2018
- On Spot registration may be available for outstation students.
- No TA/DA will be given to participants.

Workshop Fees

- Rs. 2,000/- per participant for the workshop.
- The maximum number of participant is 30. It will be based on first come first serve.
- The workshop fee will have to be paid in advance by all the participants.
- The fee includes a workshop kit, lunch and a certificate.

Registration Form

Five Day Workshop
on
Computer Vision and Image Processing
01-05 December 2018

Name: _____
Designation: _____
Organization: _____
Mailing Address: _____
_____

Telephone: _____
Fax: _____
Email: _____
Registration Fee Details
Amount: _____
Mode of Payment: _____

Date: Signature of Applicant

Decisive Advantages:

- This workshop will include all basics and in-hand knowledge of computer vision techniques for image processing task.
- Chances of collaboration with professionals will be high.
- This workshop will be perfect for new starters.
- Application of machine learning and deep learning techniques for medical and natural image analysis. The participants will go through the in-depth details and practical implementations issues and techniques to deal with these issues.
- Fusion of image processing and natural language processing is a challenging and innovative way of dealing with complex problems. The workshop will equip the participants with hands-on experience of different fusion techniques and their challenges.
- The workshop will be illuminated by highly experienced and energetic instructors who possess a deep academic/industry experience in their respective fields.