

One Week Workshop  
On

# Image and Video Analytics (WIVA - 2018)

Date: 29th March, 2018 – 02nd April, 2018

## Objective

This course covers introductory and advanced knowledge of Image and Video Processing. Various problems of the Computer Vision domain will be explored. Vision enables computer system to see and interpret the image and videos for the objects present in it. This makes computer and machines to understand the surroundings and behave accordingly. We can examine its role in many applications as surveillance, driver-assistance, driverless cars, human-machine interaction, intelligent agents, medical imaging and many more. Any kind of objectives achieved manually using cameras can be approached as an automatic solution with image and video processing fundamentals. This is really helpful to the mankind as the world is looking forward for automation in every domain of life. Since computer vision is a multidiscipline concept so workshop will also be covering some machine learning aspects of vision in addition to the image and video processing concepts. We also aim at imparting knowledge of current research spaces and challenges in image and video processing domain. MATLAB and Python with OpenCV will be used as the tools for practical handshaking.

## Course Contents

- Image and Video Acquisition and Representation techniques
- Image and Video Signal Processing
- Feature Extraction and pre-processing.
- Image Enhancement and Filtering techniques
- Image Segmentation
- Image/Video Annotation, Search and Retrieval
- Video Segmentation, Object Detection & Tracking
- Visual perception, human visual system
- Computer and Machine Vision
- Vision for Surveillance
- Medical Imaging
- Human Machine Interaction

## Resource Persons

- Professors from IITs, IIITs, NITs
- Experts from Industries
- Faculty from MNNIT Allahabad

## Important Date

Registration Deadline : **22<sup>nd</sup> March 2018**

## Registration Fee

U.G. Students 1000/-

P.G. Students 1500/-

PhD Students 2000/-

Faculties and Others 2500/-

Registration fee can be submitted in form of D.D. in favour of  
"WIVA-2018" payable at Allahabad

## Or

NEFT

A/C Name: **WIVA-2018**

A/C Number: **718400301000297**

Bank Name: **Vijaya Bank**

Bank Branch: **MNNIT Allahabad**

IFSC Code of Branch: **VIJB0007184**

## Contact

Coordinator: +91-9359133388

E-mail: [2018wiva@gmail.com](mailto:2018wiva@gmail.com)

Student Coordinator: +91-7004394850, +91-9889092231

## Convener

**Dr. Dharmender Singh Kushwaha**  
Dept. of CSE, MNNIT Allahabad

**Prof. Suneeta Agarwal**  
Dept. of CSE, MNNIT Allahabad

## Course Coordinator

**Dr. Dushyant Kumar Singh**  
Dept. of CSE, MNNIT Allahabad  
Email: [dushyant@mnnit.ac.in](mailto:dushyant@mnnit.ac.in)

**Dr. Rajitha B.**  
Dept. of CSE, MNNIT Allahabad  
Email: [rajitha@mnnit.ac.in](mailto:rajitha@mnnit.ac.in)



**Department of Computer Science & Engineering**  
**Motilal Nehru National Institute of Technology Allahabad**  
**Allahabad-211004, Uttar Pradesh, India**