One Week Workshop
On
Image and Video Analytics (WIVA - 2018)
Supported by TEQIP-III
Date: 29th March, 2018 – 22nd April, 2018

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

AIM AND SCOPE
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 learning machine 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
The major contents of the course (but not limited to):
- 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

RESOURCES PERSONS
The resource persons for the program shall include experts from NIT's, IIT's and other reputed academic/research institutions.

WHO SHOULD ATTEND
This course provides a forum for research students, faculties and R&D scientist/ engineers working in the related areas to enhance their background and get exposed to intricate research aspects. This is a general workshop that can also be attended by all UG/PG/PhD students, faculties and researchers.

REGISTRATION
To register for this course, the applicants will have to pay fees in advance via Demand Draft or NEFT. The details of the fees are as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Fees (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.G. Students</td>
<td>1000/-</td>
</tr>
<tr>
<td>P.G. Students</td>
<td>1500/-</td>
</tr>
<tr>
<td>PhD Students</td>
<td>2000/-</td>
</tr>
<tr>
<td>Faculties and Others</td>
<td>2500/-</td>
</tr>
</tbody>
</table>

Details of Demand Draft (DD)
The Demand Draft (DD) should be drawn in favour of WIVA-2018, payable at Allahabad.

Details of NEFT:
Name of the Bank Account: WIVA-2018
Bank Account Number: 718400301000297
Bank Name: Vijaya Bank
Bank Branch: MNIT Allahabad
NEFT/IFSC Code of Branch: VJIB0007184
Account Type: Current

Applicants should also send a proof of their identity and designation for claiming the category.
* The participants have to bear their own travelling and accommodation expenses.
** Accommodation may be provided on first come first serve basis to the participants, based on the availability of rooms in the institute Guest house and Hostels.

ADDRESS FOR COMMUNICATION
Complete registration form accompanied with the DD (or NEFT details) should reach to the course coordinator on or before 22nd March, 2018. The applicants are also requested to e-mail a scanned copy of the registration form with payment details.
The contact details are:
Dr. Dushyant Kumar Singh

PAYMENT DETAILS:
DD [ ] NEFT [ ]

Note: Please write the name of the course (WIVA-2018) on top of the envelope.

COMMITTEE

ORGANIZING COMMITTEE
Patron
Prof. Rajiv Tripathi, Director, MNNIT, Allahabad
Chairperson
Prof. Neeraj Tyagi, Head, Department of Computer Science and Engineering, MNNIT, Allahabad
Convener
Prof. Suneeta Agarwal, Dept. of CSE, MNNIT Allahabad
Dr. Dharmender Singh Kushwaha, Dept. Of CSE, MNNIT Allahabad
Treasurer
Mr. Pankaj Sikka, MNNIT, Allahabad

REGISTRATION FORM
Sample Registration form is as follows:
Name (in Block Letters) ____________________________ Sex: Male/Female
Date of Birth: ____________________________ Highest Qualification: ____________________________
Organization: ____________________________
Designation (Faculty / Research Scholar / Student / Industry Personnel): ____________________________
Experience: (In years) _______ Months
Correspondence Address: ____________________________ Pincode: ____________________________
City: ____________________________
Mobile No: ____________________________
E-mail: ____________________________
Accommodation Required: Yes [ ] No [ ]

PAYMENT DETAILS:
Draft No. _______ Date: ___________
Issuing Bank and Branch (with code) ____________________________
Amount: ____________________________ (In favour of “WIVA-2018” payable at Allahabad)
For NEFT: Transaction ID _______ Date: ___________

Signature of Applicant

Note: Please write the name of the course (WIVA-2018) on top of the envelope.