



ACCELERATE  
विज्ञान



# SERB High-End Workshop (KARYASHALA) on A Practical Approach to Machine Learning and Deep Learning for Computer Vision Applications using High End Computing Resources

Organized by

Department of Computer Science & Engineering  
Motilal Nehru National Institute of Technology Allahabad  
March 15 - 22, 2024

## Organizing Committee

### Patron

Prof. R. S. Verma  
Director, MNNIT Allahabad

### Chairman

Prof. D. K. Yadav, HoD,  
Dept. of CSE, MNNITA

### SERB Event Organizer & Workshop Coordinator

Dr. Dushyant Kumar Singh,  
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### Coordinator's Team

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### Venue

Dept. of CSE, MNNIT  
Allahabad, (UP)-211004  
Website:  
<https://www.mnnit.ac.in/>

## About the Programme

High-End Workshop 'KARYASHALA' is an effort by SERB, Govt. of India via Accelerate Vigyan Scheme for skill development of PG and PhD students primarily from universities, colleges, private academic institutions, and newly established institutes to pursue research oriented quality learning. This workshop will cover the introductory and advanced knowledge of Image and Video Processing methodologies through the use of various AI-based techniques. Various problems in the Computer Vision domain will be explored. Vision enables the computer system to see and interpret the image and videos, for the objects present in it. Some example applications are, surveillance, driver assistance, driverless cars, human-machine interaction, intelligent agents, etc. This program will cover the practical programming exercises for problems aligned with all the previously mentioned applications. GPU based computing facility will be available for expensive training of OpenCV/Tensorflow/Keras based ML & DL models.

**Focus areas:** Image & Video Processing, Machine Learning & Deep Learning, Vision for Surveillance, ML & DL in Medical Diagnostics & Healthcare, RNN & Activity Modelling, DL for Generative Modelling, Deep Fakes, Reinforcement Learning

**Resource Persons:** Eminent experts from IITs, NITs and other premier institutions

### Participants Eligibility:

Only PG & PhD Students are eligible. The applicants must upload the institute's identity card, detailed resume, final marksheet of UG, latest PG marksheet, and a No Objection Certificate in Institute's Letter Head from Supervisor/Head of the Department/Head of the Institute during application, for allowing the student to attend the workshop, if selected.

There is no registration fee, and the number of participants is restricted to 25. TA and accommodation will be provided to participants at the institute, as per the SERB Accelerate Vigyan norms.

Apply through this google form link: <https://forms.gle/mtwRAhgp9FqMgCKA8>

After applying through the link, intimate us at [karyashala.mnnit.cse2024@gmail.com](mailto:karyashala.mnnit.cse2024@gmail.com)

Certificate of successful completion will be issued to the participants, only on maintaining the full attendance during the workshop.

### Important Dates:

Application deadline: March 08, 2024

Notification to the selected candidates: on or before March 10, 2024

