



2nd SERB School on Robotics

Indian Institute of Technology Madras, Chennai, India

November 14 –19, 2016



Web: <http://www.ed.iitm.ac.in/~cep/SSR.html>

Introduction

The Indian Institute of Technology Madras, in association with the Science and Engineering Research Board (SERB) of the Department of Science and Technology, Govt. of India, is organizing the 2nd SERB School on Robotics at IIT Madras from 14th to 19th November, 2016. Robotics being a rapidly growing field, research, design, and development of new applications play a vital role in taking the Indian industry to new heights. The objective of the workshop is to provide the participants a comprehensive coverage of the theory and practice in the area of robotics, to prepare them to take up advanced research in the field of robotics.

Eligibility

Engineering faculty from colleges all over the country, including CFTI, can participate. Few seats will be available to research students working in the area of robotics.

Number of participants will be restricted to 45. Thirty seats will be for faculty/students from engineering colleges, 10 for scientists from R&D labs and 5 for engineers from industry.

Course Content

Theory related to Robotics:

- Linear Algebra & Spatial Transformation Principles
- Nonlinear Dynamics
- Stochastic Processes
- Control Theory
- Sensing and Perception
- Machine Learning, and Planning

(All with reference to robotics)

Applied Robotics:

- Dynamics and Control of Industrial Robots
- Actuators and Controllers- Selection and Integration
- Human-centred Robotics and Applications
- Guidance, Navigation and Control of Autonomous Robots
- Emerging Robot Applications- Medical, Aerial, Underwater etc.

Faculty

Core faculty will be selected from top Indian academic institutions and research centers. List of faculty will be made available in the website.

Course fee & payment procedure

The registration fee for the candidates from Govt. Institutes/ Universities/R&D laboratories will be nil, whereas Rs. 2000/- will be charged as seat booking fee, which will be returned along with the TA reimbursement (maximum 2-AC train fare for the shortest route) after successful completion of the course. The registration fee for candidates from private universities and industries will be Rs. 10,000/-. The registration fee includes the registration, course material and boarding and lodging for the entire duration of the school. The accommodation will be provided to the participants only, in the institute guest house, in twin sharing mode, on the first-come-first-served basis, subject to availability. The fee is to be paid in the form of demand draft drawn in favour of IIT Madras.

Online registrations will be open from 15th August 2016.

Expert Advisory Committee

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