



ADVANCES IN ROBOTICS (AIR 2023) JULY 5-8, 2023, IIT ROPAR



6TH INTERNATIONAL CONFERENCE OF THE ROBOTICS SOCIETY

Advances in Robotics (AIR) is a series of biennial conference organized by The Robotics Society (TRS). The conference aims to create a forum to present and exchange new ideas by researchers and developers from India and abroad working in the fields of robotics and its applications. The conference would have plenary talks, oral and poster presentations, doctoral symposium, start-up showcase and special industry oriented sessions. The previous editions of AIR's were held at R&DE, DRDO Pune ([AIR 2013](#)), BITS Pilani Goa ([AIR 2015](#)), IIT Delhi ([AIR 2017](#)), IIT Madras ([AIR 2019](#)) and IIT Kanpur ([AIR 2021](#)).

DOCTORAL SYMPOSIUM

The symposium involves presentations by PhD students working in all areas of robotics. It would provide an opportunity to showcase the ongoing research work and facilitate interaction with experts in the field for their valuable feedback. Both the student and the research advisor shall attend. More details including paper submission link can be found at conference website: <https://advancesinrobotics.com/2023/doctoral-symposium/>. The organizers of the conference invite short papers from Ph.D. research scholars in the following fields of robotics (representative list only, can include other related topics as well):

- Kinematics, Dynamics and Control of Robotic Systems
- Mechanisms Design and Analysis
- Manipulation and Grasping
- Human Robot Interaction
- Intelligent Sensors and Actuator Systems
- Machine Learning and Artificial Intelligence for Robotics
- Medical, Rehabilitation and Assistive Robotics
- Bio-Mimetic and Bio-Inspired Robotic Systems
- Localization and SLAM
- Climbing and Flying Robot
- Swarm Robotics
- Humanoid Robots
- Collaborative Robots/Cobots
- Virtual Reality and Haptics
- Flexible Manipulators and Soft Robotics
- Robotics for Industry 4.0
- Warehouse Robotics and Automation
- Agricultural and Ocean Robotics

SUBMISSION INSTRUCTIONS

All submissions must be limited to 2 pages of the two-column ACM Conference Proceedings format, (covering the research objectives, motivation for research, proposed methodology, current status of the research, and future challenges). These submissions will be made available in a handout during the symposium. Submissions from students both at early and late stages of their doctoral work are encouraged.

REGISTRATION

All the selected participants for the symposium need to register for the conference as a student. Those who register for the symposium can attend the conference and tutorials.

AWARDS

There will be special cash awards based on the quality of presentations.

PLENARY SPEAKERS

Prof. Pietro Valdastrì
Chair in Robotics & Autonomous
Systems
Leeds, England, United Kingdom

Prof. Gregory Chirikjian
Head of Department
Mechanical Engineering,
National University of Singapore

Prof. Gursel Alici
University of Wollongong
Wollongong, NSW, Australia

KEY DATES

Submission deadline April 15, 2023
Acceptance notification May 15, 2023

DOCTORAL SYMPOSIUM ORGANIZERS

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IIT Roorkee

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IIT Ropar

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