



ICIRA 2023 Special Session Proposal

Title of the Proposal: Design and Control of Legged Robots

Technical Outline of the Session and Topics:

Outline of the Session:

Driven by general artificial intelligence, legged robots are expected to serve in our work and daily lives within the foreseeable years. What is urgently needed is to build a more reliable legged robot that can traverse common terrain more robustly, walk more quietly, be more energy efficient, and have a longer service life. To achieve this, research on the design and control of legged robots needs to go deeper, ranging from the design of key components to the dynamic balance control of legged robots. This session aims to discuss the latest advances regarding the design and control of legged robots.

Topics of the Session:

- *Key components of legged robots*
- *Design of legged robots*
- *Simulation of legged robots*
- *Trajectory planning of legged robots*
- *State estimation of legged robots*
- *Dynamic balance control of legged robots*

Contact details of the Session Organizers

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