

Control Theory; Multi-Agent Systems; Distributed Optimization; Robotics

Proposed degrees for this position: MSc and PhD

The Cooperative Networks and Control Lab seeks motivated students for MSc. and PhD work. Our research focuses on the complimentary problems of analysis and design of networked and multi-agent systems. Our scientific approach is to explore how the mathematical field of graph theory can interface with dynamic systems and control theory in the study of these systems. We are currently focused on three core projects: i) analysis and design of networked systems, ii) formation control and multi-robot coordination, and iii) distributed power generation and the smart-grid. We focus on fundamental theory while also exploring implementation challenges on a multi-robot testbed as a demonstrator.

Requested profile (background and skills): Students with strong fundamentals in dynamic systems, control theory, and mathematics are ideal for this position. More important is the ability and desire for self-learning with a strong work ethic.

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Our Lab's Website: <https://zelazo.net.technion.ac.il/>