Welcome to the Novel Engineering for Swarm Technologies Lab!

We conduct research on swarm robotics, including coordination algorithms, software engineering, and human-swarm interaction.

Recent News

WPI Team Capricorn qualifies for NASA Space Robotics Challenge (January 15, 2021)

WPI's Team Capricorn passes the qualification round in the NASA Space Robotics Challenge, advancing to the final competition round with 21 other teams out of 114 registered teams.

Dr. Glenn Yee Graduate Student Tuition Award (August 5, 2020)

Nathalie Majchercyzk was the recipient of a Dr. Glenn Yee Graduate Student Tuition Award.

Amazon Research Award (June 17, 2020)

Carlo Pincioli was the recipient of an Amazon Research Award for the project An Immersive Interface for Multi-User Supervision of Multi-Robot Operations.

NSF Grant (March 23, 2020)

Profs. Jing Xiao, Marko Popovic, Jie Fu, and Carlo Pincioli are lead and co-PIs on a new NSF award “Phase II I/UCRC WPI: Center for Robots and Sensors for the Human Well-Being”.

Recent Publications


Distributed Data Storage and Fusion for Collective Perception in Resource-Limited Mobile Robot Swarms

Flow-FL: Data-Driven Federated Learning for Spatio-Temporal Predictions in Multi-Robot Systems


SMAC: Symbiotic Multi-Agent Construction


Designing Self-Organization in the Physical Realm