

Immediate Release

NYU Tandon researcher wins IROS 2022 Young Professional Award

Giuseppe Loianno received the IEEE Robotics and Automation Society Toshio Fukuda Young Professional Award, marking the third early-career award this year to recognize his impact on intelligent robots and systems.

BROOKLYN, New York, Wednesday, November 2, 2022

The <u>IEEE Robotics and Automation Society</u> and the <u>RSJ Robotics Society of Japan</u> have chosen <u>Giuseppe Loianno</u> to receive the <u>International Conference on Intelligent Robots and Systems</u> (IROS) <u>Toshio Fukuda Young Professional Award</u>, which is given annually to individuals still in the early stages of their careers who have made a major impact on intelligent robots and systems. He received the award at IROS, which was held in late October, in Kyoto, Japan, with some 4,000 attendees.

Loianno, an Assistant Professor of Electrical and Computer Engineering and faculty member of NYU WIRELESS at the NYU Tandon School of Engineering, was cited by the organization for his "contributions to perception-based navigation for agile autonomous aerial and ground robots."

Aerial and ground robots are often called upon to make agile maneuvers and collaborate in confined or complex environments, but they can be hampered by their limited small size and computation navigation systems. While researchers have developed innovative perception and control approaches, these are often still slow, lack robustness, and are inadequate for challenging autonomous and collaborative tasks.

Loianno, also the recent recipient of an NSF CAREER Award and a DARPA Young Faculty Award, is addressing the problem at his Agile Robotics and Perception Lab, working to develop agile and collaborative small-scale autonomous robots that can help or assist humans in complex tasks. Major applications include, but are not limited to, search and rescue, agriculture, inspection, and monitoring.

"Giuseppe's work to improve the capabilities of autonomous robots is laying the foundation for material advances in safety, security, urban living, and more," says Jelena Kovačević, dean of NYU Tandon. "In the process, he's contributing to Tandon's evolution as a major hub of robotics research,

and it is fitting that he is being recognized by organizations of the caliber of the IEEE Robotics and Automation Society, Defense Advanced Research Projects Agency, Army Research Lab, and the National Science Foundation for his efforts."

About the New York University Tandon School of Engineering

The NYU Tandon School of Engineering dates to 1854, the founding date for both the New York University School of Civil Engineering and Architecture and the Brooklyn Collegiate and Polytechnic Institute. A January 2014 merger created a comprehensive school of education and research in engineering and applied sciences as part of a global university, with close connections to engineering programs at NYU Abu Dhabi and NYU Shanghai. NYU Tandon is rooted in a vibrant tradition of entrepreneurship, intellectual curiosity, and innovative solutions to humanity's most pressing global challenges. Research at Tandon focuses on vital intersections between communications/IT, cybersecurity, and data science/Al/robotics systems and tools and critical areas of society that they influence, including emerging media, health, sustainability, and urban living. We believe diversity is integral to excellence, and are creating a vibrant, inclusive, and equitable environment for all of our students, faculty and staff. For more information, visit engineering.nyu.edu.

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