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INVITED TALK

18th December 2019

Real-World Robotics: From Swarms to Entrepreneurship

Daniel Lofaro

George Mason University









Imperial College London





1. INVITED TALK DETAILS

Date: 18th December 2019 Time: 12:00 Location: Gray Hall, University of Zagreb Faculty of Electrical Engineering (UNIZG-FER) Unska 3, Zagreb, Croatia Title: Real-World Robotics: From Swarms to Entrepreneurship Name: Daniel Lofaro Affiliation: George Mason University

2. ABSTRACT

This seminar focuses on the overarching topic of robots in the real-world. Special emphasis will be given to swarm robotics and biomimetics. Examples of our swarm robotics research with the Lighter-than-air Autonomous Agents (LTA3) will be given. Also, a brief overview of how robotics and AI are shaping our realworld/society will be discussed. The talk will close with an open discussion on entrepreneurship in engineering and the arts.

3. LECTURER BIOGRAPHIES



Daniel M. Lofaro is an Assistant Professor in the Department of Electrical and Computer Engineering at George Mason University. Lofaro is also the director of the laboratory Lofaro Labs Robotics which is a part of the international laboratory group called the DASL Autonomous Systems Lab Group (DASL Group). Additionally, he is an affiliate faculty at the U.S. Naval

Research Laboratory (NRL) in the Navy Center for Applied Research in Artificial Intelligence (NCARAI) within the Laboratory for Autonomous Systems Research (LASR). An NSF-EAPSI and ONR-SFRP Fellow, he received his doctorate from the ECE Department at Drexel University in 2013 under the guidance of Dr. Paul Oh. He was the Research Lead of the DARPA Robotics Challenge team DRC-Hubo from 2012 to 2014. His research focus is in the overarching field of real-world robotics. Within this his research interests include Swarm Robotics, Emergent Behaviors, Robot Design, Real-World Human/Robot Interaction, Humanoid













Robotics, Complex Control Systems, Secure Robotics, Cloud Robotics, Unique Musical Instrument Design, and Real-Time Systems. Lofaro's work and collaborative work has been featured in the Washington Post, NPR, IEEE Spectrum, Popular Science, and other prominent print, web, and TV news sources.











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