NICOLA BEZZO

University of Virginia
Link Lab
Department of Engineering Systems and Environment
Department of Electrical and Computer Engineering
Department of Computer Science
Olsson 245, 151 Engineer's Way, Charlottesville, VA, 22902
Tel (o): *(+1) 434-924-1365*
Tel (c): *(+1) 505-340-8856*
E-mail: *nbezzo@virginia.edu*
Webpage: *https://www.bezzorobotics.com/*

Education

- **Bachelor of Science in Electrical Engineering**—2003-2006
  Politecnico di Milano, Milan, ITALY.
  - Degree with honor (summa cum laude).

- **Master of Science in Electrical Engineering**—2006-2008
  Politecnico di Milano, Milan, ITALY.
  - Degree with honor (summa cum laude).

- **Exchange Student 1st year of Master in Electrical Engineering**—2006-2007
  Oklahoma State University, Stillwater, OK, USA.
  - GPA: 3.9/4.0.

- **Ph.D. in Electrical and Computer Engineering (Robotics & Control Systems)**—2008-2012
  University of New Mexico, Albuquerque, NM, USA.

Academic Positions

- **Assistant Professor (research focus: Resilient and Assured Autonomy)**—01/2016–present
  Engineering Systems and Environment (Primary), Electrical and Computer Engineering (Secondary), Computer Science (Courtesy), University of Virginia, Charlottesville, VA USA.

- **Postdoctoral Researcher (research focus: CPS Security & Robotics Planning)**—11/2012–12/2015
  Computer Sceince, University of Pennsylvania, Philadelphia, PA, USA.

- **Research Assistant in Electrical and Computer Engineering (research focus: Multi-Robots Coordination & Control Systems)**—08/2008–10/2012
  Electrical and Computer Engineering, University of New Mexico, Albuquerque, NM, USA.

- **Research Assistant in Electrical Engineering (research focus: Automation & Electrical Measurements)**—09/2007–07/2008
  Electrical Engineering, Politecnico di Milano, Milan, ITALY.

List of Collaborators

- Insup Lee (UPenn), George Pappas (UPenn), Vijay Kumar (UPenn), Oleg Sokolski (UPenn), Rafael Fierro (UNM), Miroslav Pajic (Duke), Sebastian Elbaum (UVA), Madhur Behl (UVA), Michael Tolley (UCSD), Ankur Mehta (UCLA).

Selected Relevant Publications

- J. Higgins, **N. Bezzo**, *Negotiating Visibility for Safe Autonomous Navigation in Occluding and Uncertain Environments*. In IEEE Robotics and Automation Letters (RAL), 2021 – Impact = 3.6
- C. Di Franco, **N. Bezzo**, *Interpretable Run-time Monitoring and Replanning for Safe Autonomous Systems Operations*. In IEEE Robotics and Automation Letters (RAL), 2020 – Impact = 3.6
- E. Yel, T. Carpenter, R. Ivanov, C. Di Franco, J. Weimer, I. Lee, **N. Bezzo**, *Assured Run-time Monitoring and Planning: Towards Verification of Deep Neural Networks for Safe Autonomous Operations*. In IEEE Robotics and Automation Magazine (RAM), 2020 – Impact = 4.5
- P. Bonczek,R. Peddi, S. Gao, **N. Bezzo**. *Detection of Non-random Sign-based Behavior for Resilient Coordination of Robotic Swarms.* In IEEE Transaction on Robotics (TRO), 2022 – Impact = 9.72
- T. Lin, **N. Bezzo**. *Energy-aware Persistent Control of Heterogeneous Robotic Systems*. In 2018 American Control Conference (ACC), Milwaukee, WI, June 27-29 2018 – Acceptance Rate = 50%.

Five Other Significant Products

- E. Yel, **N. Bezzo**, *A Meta-Learning-based Trajectory Tracking Framework for UAVs under Degraded Conditions* . In EEE International Conference on Intelligent Robots and Systems (IROS), Prague, Czech Republic, Sep 27 - Oct 1, 2021 – Acceptance Rate = 45%
- R. Peddi, C. Di Franco, S. Gao, **N. Bezzo**, *A Data-driven Framework for Proactive Intention-Aware Motion Planning of a Robot in a Human Environment*. In IEEE International Conference on Intelligent Robots and Systems (IROS), Las Vegas, NV, Oct. 25 - 29, 2020 – Acceptance Rate = 45%.
- E. Yel, **N. Bezzo**, *Computation-Aware Adaptive Planning and Scheduling for Safe Unmanned Airborne Operations* . In Journal of Intelligent and Robotic Systems (JINT), 2020 – Impact = 3.0
- **N. Bezzo**, K. Mohta, C. Nowzari, I. Lee, V. Kumar, G. Pappas, *Online Planning for Energy-efficient and Disturbance-aware UAV Operations*. In IEEE International Conference on Intelligent Robots and Systems (IROS), Daejeon, South Korea, October 9-14, 2016 – Acceptance Rate = 45%.
- **N. Bezzo**, B. Griffin, P. Cruz, J. Donahue, R. Fierro, and J. Wood, *A Cooperative Heterogeneous Mobile Wireless Mechatronic System* . In IEEE/ASME Transactions on Mechatronics (TMECH), 2014 – Impact = 4.0.

Synergetic Activities

- Organizing Committee member and Website Chair for 2022 International Conference on Robotics and Automation (ICRA) – 2020 - present
- Associate Editor for Robotics and Automation Letters (RA-L) – 2020 - present; and Guest Editor for IEEE Computer Magazine Special Issue on *Resiliency in Cyber-Physical Systems* 2018
- Co-Organizer of two *Robot Makers: The future of digital rapid design and fabrication of robots* (RoMa) workshops at the Robotics: Science and Systems (RSS) Conference. 2014 and 2016
- Program Committee Member: Conference on Robot Learning (CoRL) 2020, International Conference on Intelligent Robots and Systems (IROS) 2020, 2021, American Control Conference (ACC) 2018, International Conference on Cyber-Physical Systems (ICCPS) 2016,2018,
- Reviewer for: IEEE Transactions on Automation Science and Engineering; IEEE Transactions on Robotics; IEEE/ASME Transactions on Mechatronics; IEEE Control Systems Magazine; IEEE Robotics and Automation Magazine; Cambridge Robotica; ACTA Press International Journal of Robotics and Automation; American Control Conference (ACC); Conference on Decision and Control (CDC); International Conference on Robotics and Automation (ICRA); International Conference on Intelligent Robots and Systems (IROS); ACM/IEEE International Conference on Cyber-Physical Systems (ICCPS)