



Luca Bruzzone

Associate professor

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Education and training

1997

Laurea Degree in Mechanical Engineering

110/110 with first-class honours

Academic experience

2017 - ONGOING

Associate Professor

University of Genoa

1999 - 2017

Assistant Professor

University of Genoa

Teaching activity

- Dynamics and Control of Mechanical Systems, SSD ING-IND/13, for the Laurea Degree in Mechanical Engineering (branch of Genoa);

- Dynamics and Control of Mechanical Systems, SSD ING-IND/13, for the Laurea Degree in Mechanical Engineering (branch of La Spezia);

- Mechanics of Machinery, SSD ING-IND/13, for the Laurea Degree in Mechanical Engineering (branch of La Spezia)

- Mechatronic Laboratory, SSD ING-IND/13, for the Master's Degree in Mechanical Engineering (branch of La Spezia).

Since 2003 member of the Study Plans Commission of the Mechanical Engineering Laurea. Coordinator of this Commission for the Laurea Degrees.

Coordinator of the Laurea Degree Course in Mechanical Engineering, Automation and Mechatronic curriculum.

Research interests

His research activity is mainly focussed on the following themes:

- parallel robotics (kinematic analysis, singularity analysis, design, prototyping, impedance control)

- modular robotics (design, prototyping)

- minirobotic devices and microgrippers with flexible joints (design, prototyping)

- design of statically-balanced robotic architectures with high energetic efficiency

- application of fractional calculus to control of mechatronic devices
 - ground mobile robotics for surveillance and inspection (design, prototyping)
 - mechanical design of wave energy converters
- Participation in European research programmes (EUROShoE, Sub Bottom Cutter, ROBOCLIMBER, SmartWire), and national research programmes.

Awards for research activity:

- Best Paper Award IFIT 2016, First International Conference of IFToMM Italy, 1-2 dicembre 2016, Vicenza, Italy.
- Best Paper Award in Robotic Systems 10th IEEE/ASME International Conference on Mechatronic and Embedded Systems and Applications, September 10-12, 2014, Senigallia, Ancona, Italy.
- Emerald Literati Network Highly Commended Award 2011 for the publication: L. Bruzzone, G. Bozzini, "A flexible joints microassembly robot with metamorphic gripper," *Assembly Automation*, Vol. 30, No. 3, 2010, pp. 240-247.
- Emerald Literati Network Highly Commended Award 2009 for the publication: G. Acaccia, L. Bruzzone, R. Razzoli, "A modular robotic system for industrial applications", *Assembly Automation*, Vol. 28, No. 2, 2008, pp. 151-162.