



## Luca Bruzzone

Associate professor

✉ luca.bruzzone@unige.it

☎ +39 010 353 2967

### *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*

I lecture on the following courses of University of Genoa:

- 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 I am member of the Study Plans Commission of the Mechanical Engineering Laurea; I am Coordinator of this Commission for the Laurea Degrees.

I am vice-coordinator of the Laurea Degree Course in Mechanical Engineering, Automation and Mechatronic curriculum.

### *Research interests*

My 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

I have participated in European research programmes (EUROShoE, Sub Bottom Cutter, ROBOCLIMBER, SmartWire), and national research programmes.

Owing to my scientific activity, I obtained the following awards:

- 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.