

ANDREA MONGUZZI

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Education

October 2022 – Feb 2023	Lund University <i>Research period (as PhD student) on force-based robotic dual arm manipulation of deformable linear objects</i>	Lund, Sweden
October 2020 – today	Politecnico di Milano <i>PhD student in Information Engineering, Robotics and Industrial automation area. Research topic: Robotic manipulation of deformable linear objects</i>	Milan, Italy
Sept. 2018 – Oct. 2020	Politecnico di Milano <i>Master of Science in Automation and Control Engineering</i> Master thesis: “A collaborative and reconfigurable robotic solution for production processes with high-mix and low-volume demand” Final grade: 110/110 cum laude	Milan, Italy
Feb. 2020 – Apr. 2020	Delft University of Technology <i>Erasmus exchange</i>	Delft, Netherlands
Sept. 2015 – Jul. 2018	Politecnico di Milano <i>Bachelor of Science in Automation and Control Engineering</i> Final Grade: 110/110 cum laude	Milan, Italy
Sept. 2010 – Jul. 2015	Scientific High School “Paolo Frisi” <i>High School Diploma</i> Final Grade: 100/100	Monza, Italy

Work experience

March 2021 – Jun 2022	Politecnico di Milano Teaching assistant and Laboratory tutor - Fundamentals of Robotics – B.sc. (teaching assistant and lab tutor) - Fundamentals of Automation – B.sc. (lab tutor)	Milan, Italy
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Language Skills

Italian, Native

English, Fluent (Master of science taught in English)

Computer Skills

Excellent knowledge of **Matlab and Simulink** (curricular courses, laboratory and projects, Sept. 2015 – Oct. 2020)

Good programming skills: **C, C++** (curricular courses, Sept. 2015 – Mar. 2016, project work Sept. 2019 – Feb. 2020)

Good programming skills **Python** (Deep learning course, Feb. 2020 – Apr. 2020)

Good knowledge of **LaTeX**

Good knowledge of **MS Office Programs** – Word, Excel, Power Point

Basic knowledge of **Java, SQL, AMPL** (curricular course and laboratory, Sept. 2015 – June 2018)

Other Information

Additional activities:

- Professional License in Industrial Engineering (Esame di stato, Igiene industriale sez. A) (Feb 2021)
- Member of Alumni Polimi Association
- Master thesis developed in a Joint Research Centre between Camozzi Automation and Politecnico di Milano focused on collaborative robotics in assembly processes (Apr. – Oct. 2020)

Publications

- Monguzzi, A., Maiocchi, M., Zanchettin, A. M., & Rocco, P. (2022). Flexible robotic strategy for the assembly of ring-shaped elastic objects. *Procedia Computer Science*, 200, 376-385.
- Lucci, N., Monguzzi, A., Zanchettin, A. M., & Rocco, P. (2022). Workflow modelling for human–robot collaborative assembly operations. *Robotics and Computer-Integrated Manufacturing*, 78, 102384.
- Monguzzi, A., Badawi, M., Zanchettin, A. M., & Rocco, P. (2022, August). A mixed capability-based and optimization methodology for human-robot task allocation and scheduling. In *2022 31st IEEE International Conference on Robot and Human Interactive Communication (RO-MAN)* (pp. 1271-1276). IEEE.

- Autorizzo al trattamento dati ai sensi del GDPR 2016/679 del 27 aprile 2016 (Regolamento Europeo relativo alla protezione delle persone fisiche per quanto riguarda il trattamento dei dati personali).
- Autorizzo la pubblicazione del Curriculum Vitae sul sito istituzionale del Politecnico di Milano (sez. Amministrazione Trasparente) in ottemperanza al D. Lgs n. 33 del 14 marzo 2013 (e s.m.i.).