



ANNA BICCHI

DATE OF BIRTH: 27/May/1996

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PHD STUDENT IN BIOENGINEERING AT
POLITECNICO DI MILANO

The research projects aim in the control of steerable catheter for surgical robotics, in collaboration with Artery Project.

TECHNICAL SKILLS

Matlab (core, Simulink, Control Toolbox, Machine Learning Toolbox)

C++, OpenSim (Human Musculoskeletal Modeling)

Text Processing, Spreadsheets, Presentations, Remote Conferencing, etc.

Xsens sensor acquisition

Optoelectronic measurement systems (SMART DX 400 ,BTS SPA, IT)

LANGUAGE SKILLS

Italian: Mother tongue

English: Fluent TOEIC 800

EDUCATION

Master degree: Automation and Control engineering, Politecnico di Milano, 2019-2021

Master Thesis: "A dynamic task allocation strategy to mitigate the human fatigue in a collaborative robotics scenario"

Supervisor: Paolo Rocco, Andrea M. Zanchettin

Final mark 110/110.

Bachelor degree: Automation and Control Engineering, Politecnico di Milano, 2015-2019.

Final Mark 95/110

High School Diploma: Scientific High School 2010-2015. Final mark 90/100

WORK EXPERIENCES

Research Grant (Politecnico di Milano, January 2022 - November 2022) at department of electronics information and bioengineering. project: analysis of human motion in outdoor sports. focusing on sensors fusion algorithm.

Teaching Assistant:

- (March 2022 – June 2022) Politecnico di Milano, Milan "Advanced and Multivariable control" Course for the Master Degree in Automation and control Engineering.
- (September 2022 – December 2022) Politecnico di Milano, Milan "Fondamenti di automatica per Ingegneria Biomedica" Course for the Bachelor Degree in Biomedical Engineering.

PUBLICATIONS

C. Messeri, A. Bicchi, A. M. Zanchettin and P. Rocco, "A dynamic task allocation strategy to mitigate the human physical fatigue in collaborative robotics," in *IEEE Robotics and Automation Letters*, vol. 7, no. 2, pp. 2178-2185, April 2022, doi: 10.1109/LRA.2022.3143520.

PROJECTS

Automation of a Storage Warehouse: 03/2020 – 06/2020

Automation of a small-scale model of a storage warehouse with 3x3 storage places and a movable cart driven by three motors.

Voluntary Lower Limb Prosthesis Control 12/2019-09/2020 The purpose of this project is to "reconstruct" the sEMG signals of an amputated leg for the control of a robotic knee prosthesis, starting from the signals of all knee muscles of a right sound leg and a subset of muscles of a left simulated amputated leg.