



# ELEONORA POLLINI

Biomedical engineer with a strong interest in medical robotics and augmented reality

## PERSONAL INFORMATION

**Milano**

**Date of birth:** 13/08/2000

**Mobile number:** +39 3663174207

**E-mail:** eleonora.pollini@mail.polimi.it

**Linkedin:** [www.linkedin.com/in/e-pollini](https://www.linkedin.com/in/e-pollini)

## LANGUAGE SKILLS

- **Italian** - Native speaker
- **English** - C1: Cambridge English Level 2 Certificate in ESOL International (First) Grade A, with an overall score of 182
- **Spanish** - B2

## COMPUTER SKILLS

- **Programming languages** - MATLAB, C++ in ROS, C# in Unity, C, Python
- **Frameworks** - Unity, ROS (Robot Operating System)
- **Programs** - 3D Slicer
- **CAD** - Autodesk Fusion
- **Others** - Suite Office

## EXTRA CURRICULAR ACTIVITIES

**Buddy Project | 2023 | Politecnico di Milano**

Assistance to international students in the phase preceding their arrival in Italy and during their first period of stay in Milan and at Politecnico. [Link to certificate](#)

**Tour guide for international students | 2025 | Politecnico di Milano**

Students collaboration activity to show the campus to new international students, during the Welcome Week.

## EDUCATION

• **MASTER OF SCIENCE DEGREE IN BIOMEDICAL ENGINEERING**

**2022 - 2025 | Politecnico di Milano**

*Faculty:* BTE – Biomedical Technologies for Electronics

*Thesis:* Autonomous Robotic Transseptal Puncture for Enhanced Cardiac Minimally Invasive Surgery

*Final mark:* 110/110 summa cum laude

• **ERASMUS+ PROGRAMME**

**Jan 2023 - June 2023 | Universidad Politécnica de Madrid**

*Faculty:* ETSIT – Escuela Técnica Superior de Ingenieros de Telecomunicación

• **BACHELOR OF SCIENCE DEGREE IN BIOMEDICAL ENGINEERING**

**2019 - 2022 | Politecnico di Milano**

*Thesis:* Development of a public dataset from robot-assisted radical prostatectomy for surgical workflow and context recognition

*Final mark:* 109/110

• **HIGH SCHOOL DIPLOMA**

**2014 - 2019 | Liceo scientifico Giovanni Gandini**

**Lodi, Italy**

*Final mark:* 100/100

## RELEVANT PROJECTS

**OPTIMIZATION OF FUNCTIONAL ELECTRICAL STIMULATION (FES) STRATEGY FOR CYCLING**

**Nov 2023 - Dec 2023 | Politecnico di Milano**

The project was a group activity of the Neuroengineering course focused on identifying a muscle fatigue index from an EMG during a cycling exercise on a trike, using MATLAB.

[YouTube link](#)

**AUGMENTED REALITY (AR) IN RADIOTHERAPY**

**Sep 2023 - Jan 2024 | Politecnico di Milano**

The project was a group activity of the Medical Robotics and Technologies for Computer Aided Surgery Laboratory course and concerned the development of an AR interface, using Unity, to empower clinicians in 3D visualization of patient lesions, CT scans, and treatment plans in pre-operative phase, while keeping the current standard 2D visualization, using Microsoft HoloLens 2.

## PUBLICATIONS

- Z. Chen, A. Pierini, E. Pollini, R. Salama, T. Pauvel, E. Lievore, G. Ferrigno, and E. De Momi. 2023. RARPL6: Development of A Clinical Dataset for Surgical Workflow Recognition from Robot Assisted Radical Prostatectomy with Lymphadenectomy. In Proceedings of the 2023 8th International Conference on Biomedical Signal and Image Processing (ICBIP '23). Association for Computing Machinery, New York, NY, USA, 98–103.

[Publication link](#)