

DAVIDE PAOLETTI

BIOMEDICAL ENGINEER

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Date of birth: 09/04/1997



KEY COMPETENCE

Curious and passionate about *technological innovation*, I am characterized by critical and analytical reasoning in order to arrive at both logical and creative solutions.

My natural empathy, acquired resilience and sports experience facilitate me in building effective relationships and team working, organization and communication, result-orientation and flexible in adapting to challenges.

WORK EXPERIENCES

- From February 2024 to January 2025 1-year contract

Research fellow at NearLab (Politecnico di Milano) - Milano (Italy)

Involved in "FUtuRo project": create an innovative surgery robot used High-Intensity Focused Ultrasound.

1) Simulation, 2) Extended reality, 3) Robotic control

- From February 2023 to July 2023

Science and Technology of Robotics in Medicine - Leeds (United Kingdom)

1) Preparation of state-of-the-art documentation of the construction of the initial prototype of the medical device; 2) Laboratory experiments for characterization of the prototype.

EDUCATION

MASTER DEGREE IN BIOMEDICAL ENGINEERING (Biomedical technologies) at UNIVERSITY OF PISA.

Thesis: *Soft Magnetic Continuum Robot with Vibrating Needle to Assist Tissue Penetration*, studied the reduction of penetration force through vibration and changes in bevel angle.

RELEVANT EXAMS: **Medical robotics; Robotics for rehabilitation;** 3D printing; Economics and Management in Healthcare and Health Technology Assessment

RELEVANT PROJECT: Biomedical Technologies: crafted a 170-page report on designing a rechargeable insulin pen ("FTPen"), including device classification with MDR 2017/745, risk analysis, and mold simulation for injection molding.

Intelligent and Biomimetic Materials: "Piezoelectric actuator micropump of application".

BACHELOR THESIS: *Analysis of an Innovative Medical Device for Ambulation (TOMPOMA).*

High school diploma (scientific studies): General High at E. FERMI (Cecina - LI)

RELEVANT INFORMATION

I have been working since the age of 16. To support myself in my studies, I worked a three-shift production job in the summer and a part-time job in a construction company from 2019 to 2022 (student-worker)

LANGUAGE SKILLS

- Italian: Native speaker
- English: good proficiency

COMPUTER SKILLS

- Operation system: Windows
- Programming languages: C++, Matlab, ROS (beginner)
- Other programs: Fusion360, COMSOL, Ansys, Ultimaker Cura, MeshLab, Slicer3D, PreForm

PERSONAL INTERESTS

- Volleyball player in "C" Division
- Guitar player (self-taught)
- Amateur theatre and scenography