MARCO MURA

Born: 31 July 1999, Cagliari, Italy

Email: muramarco99@gmail.com

Phone: +39 3890271561

Professional Summary

Master's student in Electronics Engineering at the "Enzo Ferrari" Department of Engineering, University of Modena and Reggio Emilia, with hands-on experience in hardware design and embedded firmware development.

Strong interest in millimeter-wave radar technology, quantum optics and solid-state electronic devices, and neuromorphic computing.

Education

2022 - Present: MSc in Electronics Engineering - Smart Connected Systems, University of Modena and Reggio Emilia, Italy

2022: BSc in Electronics Engineering, University of Modena and Reggio Emilia, Italy. Final grade: 109/110

2018: High School Diploma - Scientific Lyceum "Antonio Pacinotti", Cagliari. Final grade: 100/100

Professional Experience

2025 - Present: Master's Thesis in Electronics Engineering, University of Modena and Reggio Emilia. Thesis work conducted in collaboration with Deep Radars S.r.l., Modena, Italy. Research focused on contactless estimation of vital parameters using millimeter-wave radar technology, through the design of dedicated hardware and signal processing algorithms for respiratory and heart rate estimation with low-cost 24 GHz CW radars, experimentally validated on human subjects.

2025: Embedded Systems Intern at Techboard Group S.r.l., Modena, Italy. Selected for a merit-based scholarship in Electronics Engineering, which led to a six-month internship at Techboard Group. Designed and developed electronic hardware, including PCB design, for embedded systems applications. Conducted experimental activities using commercial FMCW millimeter-wave radar modules for fall detection and people tracking applications.

2022/2023: Hardware Design Team Member - UNIMORE Formula Student Driverless. Designed PCBs and supported system integration for the autonomous vehicle project. Assisted with hardware testing and maintenance of the vehicle's wiring and electronics.

Technical Skills

PCB Design: Altium Designer, KiCad

Programming: C, Assembly (basic), Python, basic Web programming

Embedded Platforms: STM32, ESP32

Simulation and Modeling: MATLAB, Simulink

Version Control: Git

Additional Information

Languages: English (C1 level), Italian (native)

Personal Projects: DIY electronics and embedded systems prototypes

Personal Achievement: Finisher - Milan Marathon 2025