Leonardo Bove

Graduate Student in
Electronics Engineering

+39 338 449 0477
leonardo.bove01@gmail.com
leonardobove
leonardobove

EDUCATION

MSc in Electronics Engineering — Pisa, Italy
University of Pisa — 2023 – ongoing

- Specialization: Embedded Systems & Mechatronics
- Thesis work: Design of the software and electronic system to control and characterize a superconducting qubit.
- Projects:
  - **Qubase**: superconducting qubit pulse sequencer, based on *Xilinx RFSoC 4x2* FPGA, part of the *QICK* project at Fermilab.
- Current GPA: 30/30

BSc in Electronics Engineering — Pisa, Italy
University of Pisa — 2020 – 2023

- Thesis title: *Dispersive Readout of the Transmon Qubit*
- Degree grade: 110/110 *Cum Laude*

SKILLS

Python · C/C++ · MATLAB
Git · Linux · PSoC Creator
Electronic CAD · Spice · ADS
Quartus · Modelsim · Vivado
COMSOL Multiphysics
Simulink Model-Based Design

Electronics lab instrumentation
Tin soldering · PCB design (KiCad)
AVR/ARM embedded coding
FPGA design · 3D printing

Italian · native
English · C2
German · B2
French · A2

EXPERIENCE

Chief Technology Officer — Pisa, Italy
E-Team Squadra Corse, FSAE team — 2023 – 2024

- Define and lead the work of the Electronics and AI & Software Development divisions
- Improve reliability and performance of the electric vehicle

Embedded Software Developer — Navacchio (PI), Italy
Sintonica s.r.l. — Summer 2023

- Develop the driver firmware for TFT LCD displays for a custom embedded OS on Infineon PSoC ARM microcontroller

PCB Designer and Embedded System Developer — Pisa, Italy
E-Team Squadra Corse, FSAE team — 2022 – 2023

- Lead the development of the embedded software of the mounted PCB boards
- Develop part of the Vehicle Control Unit software, based on the FreeRTOS real-time OS
- Develop a bootloader via CAN bus, ARM and AVR compatible
- Unit and integration testing of firmware

OTHER INTERESTS

Violin

AWARDS

2014 **Best student**
Scolarship from *Fondazione Cantiere Internazionale d'Arte di Montepulciano*

EVENTS

2024 Formula Student Germany

2023 Formula Student Germany

PROJECTS

- **SpaceFibre PLL**: Model and ADS simulation of a SpaceFibre compatible 6.25GHz PLL, implemented using the SG25H4 0.25 μm SiGe BiCMOS technology from GlobalFoundries.
- **Handwritten Digit Recognition**: An handwritten digit recognition system based on a neural network implemented on Altera DE10-Lite board (Altera MAX10 10M50DAF484C7G FPGA)
- **Dual Axis Accelerometer**: COMSOL simulation of a dual-axis MEMS accelerometer with T-shape beams.
- **Rubik's Cube Automatic Solver**: A servo motor actuated Rubik cube solver robot, controlled by S32K144EVB. Developed using Simulink MBD