

Filippo Gibertini

 [filippogib.github.io](https://github.com/filippogib) |  [FilippoGib](#) |  [Filippo Gibertini](#) |  filippogib@gmail.com

EXPERIENCE

Role: Autonomous Driving Lead

Sept 2024 - present

Company: [MMR E-Driverless](#)

- Lead the autonomous driving division of a Formula Student Driverless team, managing a cross-functional team of computer engineering, software engineering and AI engineering students.
- Oversee the design, development, and deployment of perception, planning, simulation and control software.
- Coordinate with electronic engineers and vehicle dynamics experts to ensure seamless system integration and race-readiness.

Role: Autonomous Driving Software Engineer

Sept 2023 - Sept 2024

Company: [MMR E-Driverless](#)

- Contributed to the development and testing of path-planning and control modules.
- Collaborated with teammates on debugging, system validation, and race preparation, gaining hands-on experience in autonomous driving pipelines.

EDUCATION

2024 - present Master's Degree in Artificial Intelligence Engineering at **University of Modena and Reggio-Emilia**

2021 - 2024 Bachelor's Degree in Computer Engineering at **University of Modena and Reggio-Emilia**

SKILLS

Programming C, C++, Python, Java, Bash

Hardware NVIDIA Jetson AGX Orin, NVIDIA Jetson Xavier, AMD Kria, Raspberry Pi, Arduino

Simulation MATLAB, Simulink, SimPy

AI / ML OpenCV, PyTorch, NumPy, Pandas, Ultralytics, Gymnasium

Tools & OS Linux, Docker, Slurm, Proxmox, Git, ROS, ROS2, RTOS

PROJECTS

Visual Mapping Pipeline

[Link to Repository](#)

Developed a VI-SLAM pipeline tailored for Formula Student competitions.

LQR Racing Line Tracker

[Link to Repository](#)

Designed and implemented a LQR-based control algorithm for race-line tracking in autonomous racing vehicles, achieving a 35% reduction of lateral deviation in simulation and track tests.

Smart Fridge

[Link to Repository](#)

Built an intelligent fridge application using object detection and OCR to track groceries, reduce food waste, and automate shopping lists.