

Ayoub Raji

Profile and Education

Date and place of birth: 21 July 1993, **Bologna** (Italy).



2nd-year Ph.D. student in Mathematics at the University of Modena and Reggio Emilia.

February 2020: Master Degree in Computer Engineering, curriculum "**Industry and Automotive**", University of Modena. Thesis: "**Implementation and testing of dynamic path planning algorithms for autonomous driving.**"

February 2017: Bachelor Degree in Computer Engineering, University of Bologna. Thesis: "**Experimentation with point clouds generated by 3D sensors.**"

Contact information

+39 3335494699

ayoub.raji@unimore.it

LinkedIn: [ayoub-raji](#)

Github: [ayoubraji](#)

Main technical skills

- 3 years' experience in autonomous driving software development. Mainly using **C++**, **Python**, and **ROS/ROS2 framework**. Focusing particularly on planning and control algorithms.
Implementation of several solutions on a 1/10 scale autonomous RC racing car. Studies and research on **optimal trajectory generation** and **Model Predictive Control**.
- Theoretical knowledge in protocols and communication for the automotive field.
- Basic knowledge of **Automotive Cyber Security**.
- Knowledge of the following programming languages: **C**, **C++**, **Python**, Java, JavaScript, HTML, CSS ed SQL.

Main experiences

- June 2020 – Present: **Autonomous Racing Software Developer** for the Euroracing team. Participating in the Indy Autonomous Challenge.
- May 2020 – Present: **Research Collaborator at Hipert Lab**. Working on planning and control algorithms for autonomous driving systems.
- October 2018 – January 2020: **Internship student** at **Hipert Lab**, University of Modena and Reggio Emilia. Participation and wins of different editions of the **f1tenth** competition.
- December 2018 – June 2019: **Academic Tutor** – University of Modena and Reggio Emilia
- May 2017 – September 2017: **Analyst Consultant and Junior Java Web Developer** – Capgemini Italy

Languages

- **English:** Working proficiency. IETLS Band Score: 7, CEFR: C1.
- **French:** Elementary proficiency.
- **Arabic:** Elementary proficiency.
- **Italian:** Native proficiency.