

# Ali Raja Faizan

✉ rajafaizanali05@gmail.com | 🌐 FA-05 | 🌐 alirajafaizan

## SUMMARY

Second-year CS student at the University of Trento with hands-on experience in full-stack web development and data analysis. Currently exploring computer vision by building real-time detection systems with OpenCV.

**Spoken Languages:** English (B2), Italian (Native), Urdu (Native).

## EXPERIENCE

**NoleggioAvisio** | *Next.js, Supabase, Stripe API* Jan. – Mar. 2026

- Developed a **full-stack web application** for a local camper rental company, enabling customers to browse vehicles, make bookings, and complete secure online payments via Stripe
- Designed and implemented an **admin dashboard** to manage vehicle listings and bookings
- Link:** [Live Website](#)

**Kodland** Oct. 2024 – Mar. 2025

*Python Tutor (Remote)* Italy

- Taught Python to students **aged 10–15** through interactive lessons covering variables, lists, dictionaries, and the Turtle module
- Guided students in building simple games with **Pygame**, developing problem-solving and coding skills

**Webvalley – Bruno Kessler Foundation** Jun. 2023

*Research Intern* Trento, Italy

- Selected for **Webvalley Summer School 2023**. Worked on air quality monitoring using low-cost sensors calibrated with ML models
- Investigated night-time ozone peaks in Riva del Garda using **Pandas** and **Matplotlib** for data cleaning, processing, and visualization

## PROJECTS

**Orticello** | *Vue.js, Node.js+Express.js, MongoDB, Mongoose, Groq API* Oct. 2025 – Feb. 2026

- Built a **full-stack web app** for managing community urban gardens as part of a Software Engineering university course (3-member team), awarded with **max grade**
- Created role-based dashboards for citizens, associations, and administrators
- Developed a **REST API** with Express.js and MongoDB for authentication, users, and gardens using JWT
- Using Groq API integrated a simple **AI assistant** providing gardening tips based on crops and weather data
- Links:** [Live Website](#) | [Github](#)

**Autonomous Racing Cone Detection** | *C++, OpenCV, CMake, YOLOv11* Sept. 2025

- Built a real-time cone detection and track reconstruction system using **HSV filtering** and a fine-tuned **YOLOv11** model
- Reduced false positives by filtering contours on area and aspect ratio constraints
- Developed an interactive calibration dashboard with live **HSV trackbars** for dynamic parameter tuning
- Links:** [GitHub](#)

## EDUCATION

**University of Trento** 2024 – 2027

*Bachelor in Computer Science – Second Year* Trento, Italy

- \* **Main Courses:** Data Structures & Algorithms, Databases, Networking, Software Engineering, Operating Systems, Calculus I & II, Linear Algebra

**ITT Buonarroti** 2019 – 2024

*Technical High School Diploma* | **100/100 cum laude** Trento, Italy

CCNA: Switching, Routing, and Wireless Essentials (2024) [View Certificate](#)

CCNA: Introduction to Networks (2023) [View Certificate](#)

## Achievements

Placed **3<sup>rd</sup>** in the "[100 Projects for Trento](#)" competition with the project *Orticello* 2026

Selected as a mentee in the *Lead the Future* mentorship program 2025