AZZOUZI GHITA

Valbonne FRANCE • +33 7 45 44 22 03 • ghita.azzouzi04@gmail.com
www.linkedin.com/in/ghita-azzouzi-a51a8b353

SUMMARY

Robotics and Autonomous Systems Engineering Student in her second year at Polytech Nice Sophia, eagerly seeking a 4-month internship in Vietnam as an Assistant Robotics Engineer. With a deep passion for innovation in robotics and autonomous technologies, I am excited to bring my technical expertise and analytical mindset to tackle real-world engineering challenges, contributing fresh ideas and hands-on skills to dynamic international teams.

ACADEMIC PROJECTS

Robotics cup of France **Sep 2024 - May 2025**

In this thrilling French Robotics Cup project, I led the conception and development of three advanced robots, immersing myself in every stage with precision. Using Fusion 360, I modeled intricate 3D mechanical parts, mastering design accuracy for optimal functionality. I designed and fabricated custom PCBs, optimizing layouts for efficiency, then handled wiring, integration, and troubleshooting under constraints. Rigorous testing and iterative optimization boosted responsiveness—fueling my passion for intelligent, competitive robotics and collaborative innovation.

Gesture Recognition with Machine Learning **Mar 2025 - May 2025**

Embarking on this captivating embedded vision project, I was responsible for developing and optimizing the AI core of a real-time gesture recognition system. I used a camera on a Jetson Nano and focused on the integration of MediaPipe and OpenCV for efficient data preprocessing and feature extraction. My main contribution involved training the LSTM models using scikit-learn, mastering the process of model optimization and inference on the resource-constrained hardware. The entire system—from the trained model to the inference pipeline—was containerized with Docker for seamless deployment, with results displayed on an Arduino-driven TFT screen. This fusion of AI training, hardware implementation, and software integration honed my skills in computer vision and motivated me to tackle advanced autonomous systems.

Tire Optimization for F1 Circuit **Sep 2023 - Avril 2024**

With great enthusiasm, I built a Python program recommending optimal F1 tires based on circuit conditions, driver preferences, and weather data. By integrating variables like track grip, temperature, and aerodynamics into a precise recommendation engine, I mastered algorithmic design, simulations, and robust validation. This sharpened my Python skills, deepened my grasp of optimization, and inspired me to apply data-driven tools to high-performance industries like motorsports.

EDUCATION

Master degree in Robotics and Autonomous Systems **2024 - 2027**

Polytech Nice Sophia - Université Côte d'Azur - France

Bachelor Degree in Sciences and Technologies **2024 - 2025**

Polytech Nice Sophia - Université Côte d'Azur - France

Preparatory Classes in Mathematics and Physics **2022 - 2024**

Groupe Scolaire La Résidence - Casablanca - Morocco

ADDITIONAL INFORMATION

- **Technical Skills:** Proficient in programming and embedded systems, including C, C++, Python, and Arduino under Linux (Ubuntu). Strong grasp of embedded AI concepts and sensor integration. Experienced with Git for version control and Visual Studio Code for development. In electronics and robotics, skilled in robotic sensors, sensor fusion, PCB design and circuit prototyping. Expertise in modeling and automation, covering continuous and linear control systems, signal processing, simulation and analysis using Scilab/MATLAB, mechanical design, and 3D CAD with Fusion 360.
- **Languages:** English, French, Arabic, Spanish