ADHAM ALI

ENGINEERING STUDENT IN ROBOTICS & INSTRUMENTATION

PORTFOLIO

https://adhamelkomi.github.io/portfolio/

CONTACT

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SKILLS

Robotics & Automation

- Introduction to industrial programmable logic controllers (PLCs)
- Programming in Ladder language (LD)
- Proficient in ROS (Robot Operating System)

Embedded Programming & Software Development

- Programming in Python, C/C++, Shell/Linux, Arduino
- Sensor data processing (LiDAR, camera)
- Real-time system design and integration

CAO & Conception

- Mechanical modeling and 3D design using Fusion 360

LANGUAGES

- Arabe (Native)
- Francais (C1)
- Anglais (B2)
- Espagnol (B1)
- Allemand (A1)

CERTIFICATES

TOEIC® Listening and Reading test
02-2025

DELE (Diploma de espanol como lengua extranjera)
06-2021

PROFILE

4th-year engineering student at Polytech Dijon, majoring in Robotics and Instrumentation. I am seeking a full-time internship of at least 17 weeks between April and August 2026 in the fields of industrial robotics, mobile robotics, or automation.

EDUCATION

Engineering Degree in Robotics & Instrumentation 09-2022 – PRESENT
Polytech Dijon | Université de Bourgogne *Dijon, France*

French General Baccalaureate Diploma Graduated 06-2022
Lycée français de Koweït (LFK) *Salmiya, Koweït*
With Highest Honors (Mention Très Bien)

EXPERIENCE

Mobile Robotics Internship 06-2025 – 07-2025
ImViA Lab, University of Burgundy

Integration, SLAM visualization, and navigation planning on Clearpath's Jackal robot

- Integrated, visualized, and planned SLAM navigation on Clearpath's Jackal robot
- Designed an autonomous navigation protocol for full exploration and mapping of a lab
- Tools: ROS, RTAB-Map, RViz

AWAKE Challenge 2025 | INNOVATEAM (National Robotics Competition) Completed 06-2025
Puteaux, France

Co-developed a 1/10-scale autonomous vehicle

- Achieved 4th place out of 12 competing teams
- Conducted electrical analysis of the power system (motors and control board)
- Designed the chassis, body, and component mounts using Fusion 360

Omnidirectional Drawing Robot Completed 01-2025

Designed and built a mobile robot capable of drawing precise geometric shapes

- Programmed in C/C++ and Arduino
- Embedded system design on Webots
- Sensor and actuator integration
- Systematic troubleshooting and debugging

Simulated Exploration Robot with LiDAR Completed 12-2024

Autonomous Vacuum Robot Development with Obstacle Avoidance and Room Detection

- Designed a custom algorithm to compute the barycenter of a room and navigate between rooms.
- Implemented using C++, OpenCV, and Qt for real-time perception and control.

ASFOUR Game - Interactive Boids Simulation Completed 11-2024

Programmed a game from scratch in Python using Pygame with a custom graphical interface

- Developed interactive interfaces and simulations using Python and Pygame
- Implemented and optimized movement algorithms based on cohesion, alignment, and separation rules
- Used an iterative approach to enhance performance and optimize trajectory calculations