Maha Touri

Toulon, France | mahat2002@outlook.com | +33 6 05 58 27 56 | 23 years old |

My LinkedIn | My website: https://www.mywebsite.com

Profil

Engineering student pursuing a double degree in mechatronics and robotics engineering. Seeking a 6 month internship starting in February 2025.

Education

Seatech Engineering School | Toulon, France   Sept 2024 – 2026
- Pursuing a double degree in Mechatronics and Robotics Systems.

INSA Hauts-de-France Engineering School | Valenciennes, France   Sept 2022 – 2024
- Third and fourth year engineering student in Mechatronic Systems

CPGE Mohammed VI | Kenitra, Morocco   Sept 2020 – 2022
- Two-year intensive pre-Engineering preparation course for entrance into engineering schools in Mathematics, Physics, and Industrial Sciences

Experience

Robotics Engineer Intern – Medical Application | CRTA, Zagreb, Croatia   April 2025 – August 2025
- with KUKA robotic arms for ultrasound and biopsy procedures, implementing safe and precise motion strategies. Optimized robot base placement using genetic algorithms to minimize singularities and joint limits and using a ROS manipulability `reach_ros2` package.
- Simulated patient movements by programming one KUKA robot, and developed a PI-controlled strategy enabling a second robot to follow these movements in real time.Designed and 3D-printed a prosthetic phantom support using SolidWorks for experimental validation.

Robotics R&D Intern| IME (Instituto Militar de Engenharia), Rio de Janeiro, Brazil   Sept 2023 – January 2024
- Developed a digital twin of robotic assembly line with a Yaskawa arm using ROS (Gazebo, MoveIt, RViz) to optimize motion planning and detect collisions before deployment.

Projects and Certifications

- **Autonomous Robot Project**: Developed a mobile robot from scratch, familiarizing with Object-oriented programming in C#, Microchip 16-bit processors, timers, ADC, PWM, and implemented serial bus protocols (UART, I2C, SPI).
- **Autonomous Navigation with TurtleBot2**: Developed an autonomous navigation system using TurtleBot2 and ROS, implementing a finite state machine to manage obstacle avoidance based on real-time LIDAR and bumper sensor data.
- **Camera Perception for RoboCup**: Integrated YOLOv8 object detection into the JeVois Pro camera to enhance robotic visual perception for the RoboCup competition as part of the Robot Club Toulon's team.
- **Machine Learning with Python**: Completed a FunMooc certification on machine learning using Scikit-learn.

Technical Skills:

- Languages: Embedded C, C++, Java, Python(OpenCV, Scikit-learn, IKPY)
- Robotics Tools: ROS (Moveit/Gazebo/RViz), MATLAB/Simulink, Catia, SolidWorks, Fusion 360, Eagle, Git, Ubuntu.

Interests:

- Basketball, Guitar, Pottery.

Languages:

- Arabic/ French: Fluent
- English: TOEIC 940/990
- Spanish/Portuguese: Conversational