

AYOUB HSAINE

Robotics and Cobotics Engineer, seeking first employment starting in September.

@ ayoub.hsaine2001@gmail.com

+33 7 60 13 44 57

Bordeaux, France

in Ayoub Hsaine

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Portfolio

Driving License B



PROFESSIONAL EXPERIENCES

Final Internship

Generation Robots | March 1 to August 30, 2024

- The internship focuses on the development, implementation, and testing of algorithms that enable the GR100 robot to verify the integrity of an outdoor fence.

Research Internship

Laboratory of Systems Engineering of Versailles (LISV) at Paris-Saclay University | June 19 to July 26, 2023

- The internship focuses on the interpretation and analysis of EMG signals, as well as the calculation and estimation of the elbow angle using MATLAB. This involves data collection for the triceps and biceps muscles, both with and without a 2 kg load, as well as MVC.

Application Internship

CHU, Fez | August 1 to August 31, 2022

- Development of a mobile application to solve the problem of prescription validation.

Summer Internship in China

Global Summer School at Zhejiang University | August 1 to August 15, 2022

- Intelligent transport and smart mobility.
- IoT and intelligent service robots.

Observation Internship

Floquet Monopole, Fez | July 1 to July 31

- Familiarized with the vehicle disc production line through various operations.

SKILLS

Programming Languages: C/C++, Java, Python, and MATLAB

GUI in C++ with QT

Operations Research

Fuzzy Logic

Ubuntu

Arduino, Raspberry Pi

VHDL

LabVIEW

Simplify3D

Automation: Ladder, Grafset, GEMMA

Docker

Sensor Technology

OpenCV and Computer Vision

Blender

Project Management, Strategic Management, and Innovation Management

Localization and Navigation Methodology (Kalman Filter, SLAM)

Design and Modeling of Robotic Systems

3DExperience

ML, DL

Signal and Image Processing

Drone Modeling

Knowledge in ROS

EXTRACURRICULAR ACTIVITIES

- Head of Robotics Workshops, Treasurer, and Trainer at DIGICLUB.
- Head of External Relations at CYBERCLUB.

EDUCATION

State Engineer in Robotics and Cobotics | Sep 2021 - Jun 2024

Euro-Mediterranean University of Fez, EIDIA

Integrated Preparatory Cycle | Sep 2019 - Jun 2021

Euro-Mediterranean University of Fez, EIDIA

Baccalaureate in Physical Sciences | Jun 2019

Mohammed EL Rakrafi High School, EL JADIDA

ACADEMIC PROJECTS

- Safe Box using LabVIEW MyRIO.
- PepperChat: Integration of ChatGPT for intelligent conversations with the Pepper robot.
- OpenCV and OCR for parking management.
- Comparative Study: Path planning using search algorithms: DFS, BFS, and A*.
- RoverBot: A mobile robot designed with mecanum wheels.
- COVID-19 detection using support vectors, KNN, and perceptron.
- Differential drive control using a fuzzy logic controller.
- Design and simulation in VHDL of an electronic lock.
- Real-time object detection with MATLAB.

CERTIFICATES

- Introduction to ML and DL | Kaggle
- Specialization in Embedding Sensors and Motors | Coursera
- Image Processing and Signal Processing | MathWorks
- Introduction to AI | IBM

LANGUAGES

Arabic

French

English

Spanish