AYOUB HSAINE

Future robotics and cobotics engineer looking for an internship starting in February.

@ ayoub.hsaine2001@gmail.com
in Ayoub Hsaine

+212 6 33 94 56 98

O Ayoub Hsaine

Driver's license B.



PROFESSIONAL EXPERIENCE

On Site Research Internship

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

- Interpretation and analysis of EMG signals involve filtering and feature extraction, as well as calculating and estimating elbow angle.
- Data collection for triceps and biceps muscles, with and without a 2 kg load, as well as MVC.
- Technical skills acquired: interfacing with EMG signals, Vicon camera system, marker placement, and the use of 3D Vicon software.

Remote Application Internship

CHU, Fes | August 1 to August 31, 2022

• Development of a mobile application addressing the prescription validation problem.

Remote Summer Internship in China

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

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

On-Site Initiation Internship

Floquet Monopole, Fes | July 1 to July 31

• Familiarization with the vehicle disc production line through various operations.

SKILLS

Programming Languages: C/C++, Java, Python, and MATLAB C++ GUI with QT **Operations Research** Ubuntu **Fuzzy Logic** Arduino, Raspberry Pi VHDL LabVIEW Simplify3D Control Systems: Ladder, Grafcet, GEMMA Sensor Technology ML and DL | Altova, MongoDB Signal and Image Processing Project Management, Strategic Management, innovation management Localization and Navigation Methodology (Kalman Filter, SLAM) Robotics System Design and Modeling **Computer Vision** Android studio Catia ROS Blender 3D drone design and modelling

PARA-UNIVERSITY ACTIVITIES

• Robotics Workshop Leader, Treasurer and Trainer

EDUCATION

State Engineer in Robotics and Cobotics | Sep 2021-Present

UEMF, EIDIA, Fes

Integrated Preparatory Cycle | Sep 2019 - June 2021

UEMF, EIDIA, Fes

Bachelor's Degree in Physical Sciences | June 2019

Mohammed EL Rafrai High School, EL Jadida

ACADEMIC PROJECTS

- Safebox using LabVIEW MyRIO.
- PepperChat: Integration of ChatGPT for intelligent conversations with 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.
- Smart Home.
- COVID-19 Detection using Support Vectors, KNN, and Perceptron.
- Differential Drive Control using Fuzzy Logic Controller.
- Design and VHDL Simulation of an Electronic Lock.
- Real-time Object Detection with MATLAB.

CERTIFICATIONS

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

LANGUAGES

Arabic French English Spanish