



# IKRAM EL MOUSSAOUI

— EMBEDDED SYSTEM ENGINEER —

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📍 Toulouse, France

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👤 24 ans

## PROFESSIONAL PROFILE

Embedded Systems Engineer with 1 year of experience at Continental Engineering Services, passionate about embedded systems and skilled in driver development, SoC architectures, low-level programming for embedded systems, and technical problem-solving. I am seeking a position starting from September 2024.

## EDUCATION

### Master of Complex Systems Engineering

Bretagne Sud University – France

Sept. 2021 - June 2024

- Thesis focusing on the development and integration of drivers on Nvidia SoCs for the operation of cameras for ADAS (Advanced Driver Assistance Systems).

### Bachelor's Degree in Electronics/Optics Embedded Systems

Limoges University – France

Sept. 2020 - June 2021

- Final Year Project 'City Crossroads Traffic Lights with Priority Lanes Automation' aimed at controlling traffic lights.

### University Diploma in General Studies (DEUG)

Cadi Ayyad University - Morocco

Sept. 2017 – June 2020

- Higher Education in Physical Science and Mathematics.

## INTERESTS

- Scientific reading, particularly in cosmology.
- Practice of yoga and dance.

## SKILLS

### Programming Languages

- C/C++
- Python
- VHDL
- Matlab
- Assembly

### System Development

- Kernel development
- Communication protocols
- SoCs
- Real-time systems
- Debugging
- ROS

### Language Skills

- French : Fluent
- English : Fluent
- Arabic : Native Language

### Development Tools

- Git/GitHub
- Bash scripting
- Agile Project Management (JIRA)
- Jenkins
- Artifactory

## PROFESSIONAL EXPERIENCES

### Embedded Systems Developer

Continental Engineering Services - Toulouse, France

Sept. 2023 – Sept. 2024

- Integration, testing, and development of drivers for ADAS cameras, on Nvidia SoCs, debugging, and Nvidia forums.

### RTOS Project

Bretagne Sud University - Lorient, France

Nov. 2022 – Dec. 2022

- Implementation of a 3-axis gimbal stabilizer (steadycam) using three servo motors utilizing the STM32 board.

### FPGA Project

Bretagne Sud University- Lorient, France

Sept. 2022 – Oct. 2022

- Development of a simple 16-bit microprocessor using the Basys3 board.

### Internship: Improvement of an embedded control interface for machines

Trane Technologies - Charmes, France

Sept. 2022 – Oct. 2022

- Evaluate the cause of performance issues in a virtual simulator, propose a solution that may involve an alternative data exchange method between data and the modbus/IPC3 interface other than the COM technology.

### QT Project / Python Project

Bretagne Sud University - Lorient, France

Jan. 2022 – March. 2022

- Implementation of a local messaging system using TCP and UDP protocols using Qt in C++.
- Implementing the Q-Learning method for the Frozen Lake game in the gym environment using Python.

### ROVER Project

Bretagne Sud University- Lorient, France

Oct. 2021 – Feb. 2022

- Implementing the control of a ROVER. Controlling 4 ROVER motors, adding a distance sensor in bare-metal and real-time.

