## **Embedded Systems Engineer**

Looking for a final year intership of 6 Months Starting from February 2025



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in youba-ferhoune

## **PROJECTS & ACHIEVEMENTS**

#### FPGA-based DCC control unit

April 2024

- Sorbonne University
- Expetise in implementing mixed hardware/software systems on FPGAs with the XIIInx Microblaze processor and IP integration.

#### Checker RISC-V RV32I

- Sorbonne University
- Development of a Python checker for verifying RISC-V architecture in SystemVerilog.

#### ARM processor VHDL design

- ☐ September 2023
- Sorbonne University
- Modeling of a 4-stage ARM pipeline processor for executing assembler programs.

#### FPGA-based mini game console

- January 2023
- Sorbonne University
- Implementation of the brick-breaker and Pong games in VHDL, integrated on an FPGA board.

## **EXPERIENCES**

#### Arduino workshop organizer and facilitator

- February 2021
- ISC Scientific Club
- Project management, debugging and mentoring skills.

#### Co-Founder & head of development department

☐ April 2020

- ITdrops
- Skills in entrepreneurship, innovation, project management, leadership and team coordination.

## **INNOVATION PATENT**

Patent N°: 11357

#### **Algerian National Institute of Industrial Property (INAPI)**

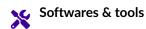
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**Title of invention:** Device for disinfecting hands and objects, detection of mask wearing with non-contact temperature acquisition and storage.

### **TECHNICAL SKILLS**

## </> Programming

VHDL Verilog SystemVerilog C/C++
SystemC Python MATLAB Git
Github



Xilinx Vivado AMD Vitis GHDL
Intel Quartus MATLAB Simulink
Cadence PSpice

#### **STRENGTHS**

Autonomous Persuasive
Curious

## **LANGUAGES**

French: C2English: B2

## **EDUCATION**

# Master 2 in Computer Engineering Sorbonne University

- Sept 2023 Present
- Architecture and design of MIPS and RISC processors.
- Concurrent programming and object modalization: C++.

# Bachelor in Electronics, Electrical Engineering, and Automation (EEA) Sorbonne University

- **Sept 2021 June 2023**
- Digital systems and embedded processors.
- Microcontroller-based systems.

# High School Diploma in Mathematics Lycée Zennache

☐ June 2019