



# BELKHER RADOUANE

## Engineering of Embedded Systems Networks & Telecommunications

Looking for a job in Embedded Systems | Automation & Control | IoT & Robotics

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in radouane-belkher

📍 Administrative district -TISSA

👤 23 years

### 🎓 EDUCATION

**University Hassan II –Faculty of Science and Technology (FSTM) | Mohammedia.**  
2021– 2022 : Master in Embedded Systems Engineering , Networks and Telecommunications.

**University Hassan II –Higher School of Technology (EST)|Casablanca.**  
2019-2020 : Professional license in Mechatronics.

**University Sidi Mohamed Ben Abdellah –Higher School of Technology (EST) | Fes.**  
2017-2019 : DUT in Electromechanics.

**HIGH SCHOOL –EL MANSOUR DAHBI | TISSA.**  
2016-2017 : Baccalaureate in Physics-Chemistry.

### 👜 PROFESSIONAL EXPERIENCES

**PFE internship at Orange Digital Center | Rabat -5 months 2022 (in progress)**  
*Subject* : "Realization of an autonomous drone for delivery of medicines to rural areas"  
*Keywords* : Ardupilot Mega ( APM3.2.1 ), Raspberry PI 4 , Camera Module v2.1, ArUco marker, MPU6050, Module GPS Neo-7M , dongle 3g , ESCs , Servo motor , linux OS , Python, OpenCV, Optical flow, UART, I2C, TCP/IP, Ser2net, ThingSpeak , Firebase, SITL Simulator, Mission Planner, ROS – Gazebo .

**PFE internship in Electrical Engineering Department | EST-Casablanca -2 months 2020 .**  
*Subject* : "Sizing and simulation of a solar pumping station for watering agricultural land and domestic use"

- ✓ Sizing of solar pumps.
- ✓ Sizing and configuration of the field of photovoltaic panels.
- ✓ Choice of electrical protection equipment for the station

**Technical internship at Finetti | Casablanca - 2 months 2019 .**  
*Subject* : "Reduction of the electricity consumption of an RTWD refrigeration installation"

- ✓ Functional analysis and diagnosis of refrigeration station.
- ✓ Proposal for a new configuration of the command at the station.
- ✓ Automatic management of chilled water production to cool packing rooms.

**Renault initiation internship | Casablanca -1 month 2018 .**  
✓ Automotive technology.  
✓ Automotive overhaul, diagnostics and maintenance.

### 🔧 AUTOMATION PROJECTS

- Control of a mixing station, reactor station, bottling station with the **SIEMENS PLC**.
- Control of a part distribution and sorting station with a **FESTO PLC**.
- Regulation of the relative pressure in a circuit via an automatic valve by an **Arduino-uno** board using the **LabVIEW**.
- Control of a traffic light with pedestrian crossing with a **SCHNEIDER PLC**.
- Management of a car park with a **PIC16F877** microcontroller.
- Design of a calculator based on the PIC16F877 using the **Proteus "ISIS "** and developed in **Assembler**.
- Design of an image processing application with Matlab.

### ⚙️ HARD SKILLS

#### Industrial computing and programming languages :

- Microprocessor systems, Microcontroller systems, FPGA circuits, linux OS.
- Programming languages: Python ,C , C++ , Assembler ,VHDL.

#### Electronics :

- Analog / digital electronics.
- Instrumentation and associated electronics.
- Digital electronic design techniques (CAD, analysis & synthesis of electronic systems).

#### Automatic :

- Industrial servo-control and regulation
- Actuators, sensors and industrial instrumentation.

#### Automatism :

- Sizing of automated industrial systems.
- Programming and interconnection of industrial PLCs.
- Definition and creation of supervision tools.

#### Electrical :

- Industrial electricity & power converter
- Study and construction works CAD, modeling and control of electrical machines.

#### Networks & Telecommunications :

- Multimedia Signal Processing & sensor networks.
- Wireless communication protocols: WiFi, Zigbee, Bluetooth.
- Knowledge of interconnection and debugging buses : SPI, UART, I2C, CAN, LIN.
- Industrial Local Networks (RLI): Modbus, Profibus, Profinet, Ethernet.
- Telecommunication systems (lines, circuits, antennas).
- knowledge of the principles of communication systems (coding, compression, modulations).
- Advanced transmission, fiber optic telecommunications, radar systems, GPS and RFID technology.

### 💻 SOFTWARES

Matlab/Simulink , Micro C for PIC , National Instruments LabVIEW , Proteus "ISIS & ARES" ,Simatic Step7 , FST 4.21, Schneider , Cisco Packet Tracer , CATIAv5 .

### 👤 Soft Skills

- + Analytical & synthetical mind.
- + Disciplined, Organized, Agile.
- + Team Work & spirit of collaboration

### 🌐 LANGUAGES

Arabic : + + + +  
French : + + +  
English : + +