Roua ROMDHANE

Electrical Engineering Student

I am an Electrical Engineering student , curious motivated and determined, who is eager to learn and looking forward to broaden my knowledge in Embedded Systems and Artificial Intelligence.

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Tunis

EDUCATION

Electrical Engineering
Higher National Engineering School of Tunis- ENSIT/Monrfleury, Tunis

09/2020 - Present

Preparatory Diploma for engineering studies (PT)
Preparatory school/ El Manar

09/2018 - 09/2020

WORK EXPERIENCE

Initiation Internship
SEABOT /Nabeul, Tunis.

08/2021 - 09/2021

Prototyping a water sampling system for an ROV robot.

Description

- Create a sampling system mountable on ROVs capable of taking 10 samples at different depths to help Oceanographers in their studies.
- This project was done using: Arduino Nano, LattePanda, Motor controller, Altium Designer, UART communications, Isis Proteus.

ORGANIZATIONS

Electronics ENSIT (11/2020 - 11/2021)
MEMBER

IEEE (12/2021 - Present)
MEMBER

IEEE RAS ENSIT STUDENT BRANCH CHAPTER ENSIT (05/2021 - Present)
WEBMASTER

Association of Young Creatives and Conscious Siliana Siliana (05/2021 - 01/2022)
WEBMASTER

Forum ENSIT (02/2022 - Present)
WEBMASTER

LANGUAGES

Arabic
Native or Bilingual Proficiency

French
Full Professional Proficiency

English
Professional Working Proficiency

INTERESTS

Photography | Music | Violon | Piano | Sport

SKILLS

Python, proteus, Arduino, VHDL,TIA PORTAL, Step 7.

QuartusII, C++, Altium Designer,Labview, Matlab.

UX UI designer, Photoshop, Adobe Illustrator.

PERSONAL AND ACADEMICAL PROJECTS

IOT project using sensors
- Speed variation of three motors from potentiometers via microcontroller STM32F4. Temperature measurement by DS1621 then sending the temperature to the microcontroller via the I2C communication protocol.
- Data transmission (3 speeds and temperature) to ThingSpeak (platform for collecting and storing data). Tools: STM32F4, ESP8266, Timer, ADC, DMA, UART, I2C, Keil, ThingSpeak.

STM32 Project
- Speed variation of a motor by an STM32 microcontroller and transition of the speed to a smartphone via Bluetooth via the UART protocol, Tools: STM32F40, Timer, ADC, UART, PWM.

Final second year prject
- Design and production of a universal card for the acquisition of currents and voltagesfor the numerical control of electrical machines.
- This project was done using: Altium Designer, Arduino Nano.

Final first year project
- Configuration of an installation network for small business.
- Mention the choice of topology to consider in the realization of the network Of MAGHREBCODE MULTIMEDIA MCM.
- Realization of the company's Network.

All terrain Robot
- A small robot with a distance sensor and an actuator. If the distance sensor detects something, then it should rev up.
- This project is developped using: Arduino programming, realisation of robot's conception.

Mini processor conception
- The Cyclone II Family card choice.
- Simulation and VHDL programmin the UAL, contollor, Multiplexer 2/1, Multiplexer 4/1, Demultiplexer 1/4.

CERTIFICATES

Course Certificate of Introduction to Embedded Systems Software andDevelopment Environment from University of Colorado; Coursera.

Course Certificate of HTML, CSS, and Javascript for Web Developers from Johns Hopkins University; Coursera.

Certificate of Digital Marketing from HUBSPOT ACADEMY.

Certificate of Completion of Machine Learning and AI (Including hands - on 3 Projects) with Mr.EdYoda Digital University; Udemy.

Certificate of participation in National Robotic Competition "ENSTA ROBOTS 2.0"; ENSTAB.