Karem BenChikha

Industrial and Automation Computing Student Specialized in Embedded Eystems and Cloud Computing

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PROFESSIONAL EXPERIENCE

Perenco   *Oil & Gas Company*
DCS automation intern   *(Jun 2019 – Jul 2019)*
• Assisted 2 Automation Engineers in DCS control rooms.
• Updated control logic documents and designed a HMI to control new pumps increasing Natural Gas flow by 15%.

Valeo   *Global Automotive Manufacturer & Supplier*
Quality Project Management Intern   *(Jul 2018 - Aug 2018)*
• Drew up quality assurance documents for a production line of a new Product.
• Analyzed production KPIs and developed effective solutions improving the occurrence of Haptic defects from 82% to 27%.

PeakSource   *Information Technology & Services Agency*
Electronics intern   *(Juin 2017 - Jul 2017)*
• Tested and assisted with programmable lighting devices and audio-video equipment.
• Programmed NAO Robot to perform in press conferences.

EDUCATION

Florida Gulf Coast University
Entrepreneurship Student   *(Fall 2019 - Spring 2020)*
relevant courses: Business Analytics, Creativity, Lean Startup.

National Institute of Applied Science and Technology
Industrial and Automation Computing student   *(2015 - Current)*
relevant courses: Industrial Regulation, Automatic systems, Electrical Engineering, Robotics, Mechanical Design.
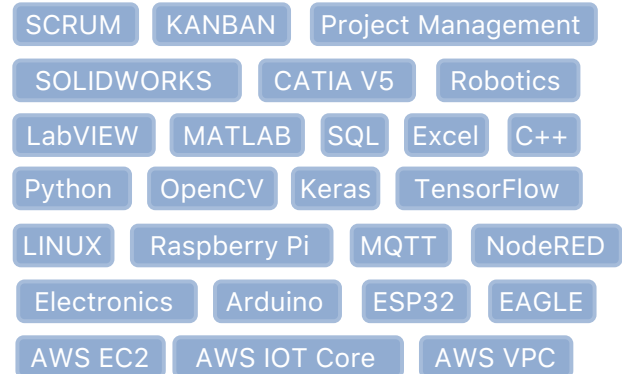
CAMPUS INVOLVMENT

Amazon Web Services
Student Ambassador   *Cohort of 2020*
• Lectured Campus students on the integration of AWS services in the Internet of things and robotics.

Florida Gulf Coast University International Office
Eagle International Ambassador   *Fall of 2019*
• Volunteered in international office campus programs, organized cultural events and led community service activities.

AeROBOTiX Club INSAT
Technical Trainer and Projects Manager   *(2015 - 2019)*
• Coached and mentored students to build their robots and science projects.
• Supervised technical workshops in robotics and electronics.

SKILLS

SCRUM   KANBAN   Project Management
SOLIDWORKS   CATIA V5   Robotics
LabVIEW   MATLAB   SQL   Excel   C++
Python   OpenCV   Keras   TensorFlow
LINUX   Raspberry Pi   MQTT   NodeRED
Electronics   Arduino   ESP32   EAGLE
AWS EC2   AWS IOT Core   AWS VPC

CERTIFICATIONS

• AWS Fundamentals.
• Industrial IOT on google Cloud Platform.
• Real time Embedded Systems
• Mastering Programming with MATLAB
• Solidworks Certified Professional (CSWP)
• Yellow Belt Lean Management and Manufacturing
• TOFEL ITP (580/677)

HONOR AWARDS

• Thomas Jefferson Scholarship Program 2019 - 2020 by U.S. Department of State

• BIAT Foundation Elite Scholar 2015 - 2020 by BIAT Bank of Tunisia

• Dean's List Academic Award for Fall 2019 by Florida Gulf Coast University

LANGUAGES

English   Full professional proficiency
French   Professional working
German   Elementary

ACADEMIC PROJECTS

Facemask Detection *Algorithm with machine learning model to identify people wearing facemasks.*   *Sep 2020*
• Trained a Neural Network model on a dataset with a prediction accuracy of 96% and Implemented it in an OpenCV algorithm to detect faces and command an Arduino to authorize or block access.

Ball and Beam   *PID control with LabView to stabilize a ball on a beam.*   *May 20219*
• Coordinated with 2 classmates to implement a PID controller on an Arduino in a mechanical system.

Cloud Supervised Factory *IOT Monitoring of sensors and actuators in an educational SIEMENS Factory.*   *Jan - Mar 20219*
• Established a communication between Raspberry Pi and SIMATIC S7 controller via MQTT.

Smart Aquarium   *Gadget to monitor and control vitals of fish in a home aquarium via ESP32.*   *Feb - May 20218*
• Headed a team of 4 students into finalizing the project and winning second prize in IOT Tunisia Hackathon.
• Brainstormed both business model ideas and technical solutions for the gadget's modules.