

**An Electrical Engineer with over 2 years of experience in system integration, IoT, and defense technologies. Proficient testing complex systems, with a strong background in hardware validation and signal analysis. Adept at working in fast-paced environments and collaborating with cross-functional teams to achieve project goals.**

## EDUCATION

**City College of the City University of New York**

Bachelor of Engineering, Electrical Engineering:

**June 2021**

**Faculty of Law Alexandria University**

Bachelor's degree in law

**May 2013**

## EXPERIENCE:

**Integrated System Engineer**

**Actalent (Lockheed Martin)**

**Oct 2022 – Oct 2023**

- Developed and executed comprehensive hardware validation test plans and test cases to ensure products met stringent quality and performance standards.
- Identified, documented, and tracked hardware bugs and collaborated with design and development teams to drive timely resolution.
- Designed and implemented automated test scripts to improve efficiency and expand test coverage for various hardware components.
- Performed root cause analysis of complex hardware failures and provided detailed reports to engineering teams.
- Validated system performance and functionality across a range of environmental conditions, including temperature, voltage, and stress testing.
- Operated and maintained lab equipment, including oscilloscopes and logic analyzers for testing and debugging.
- Contributed to the definition of hardware specifications and provided critical feedback on design for testability (DFT).

**Electrical Engineering**

**NSWCPH (NAVSEA)**

**Aug 2021 – Feb 2022**

- Worked on navigation and steering systems for naval vessels.
- Developed and implemented configuration procedures, ensuring systems met quality standards.

**Data science program assistant**

**City College of New York**

**Jan 2020 – June 2020**

- Developed marketing materials, prepared surveys, and analyzed data to create reports for program evaluations.
- Tracked co-op student progress, assisted with planning program events, and helped prepare students for interviews.
- Communicated job and internship opportunities to students and participants in the program.

## PROJECT

**Air Quality Sensor (Smart Air)**

**Fall 2020**

- Designed an air quality monitoring system using NodeMCU, detecting temperature, humidity, CO, and alcohol.
- Integrated cloud-based monitoring via ThingSpeak for real-time data analysis, achieving 97% accuracy.
- Completed the project 32% under budget (\$34 out of \$50).

**Solar Tracker**

**Spring 2020**

- Emulate device that keeps a panel holding a solar cell to follow the sun as it moves across the sky.
- Using Arduino and 4 light dependent resistors.
- The design was a single axis mount in which the rotating axis is directed at the North Star

**Four-way Traffic Light with Pedestrian Crossing**

**Spring 2019**

- Designed and tested a traffic light controller using Multisim and logic gates.
- Met all client requirements and specifications in the final product.

## SKILLS

**Design Software:** Multisim, Android studio, sublime, Adobe AfterEffect, OpNet, LabVIEW, visual studio

**Testing & Debugging:** Test Plan Creation, Test Automation, Bug Tracking Systems (Jira), Root Cause Analysis

**Operating Systems:** Windows 7/8/10, Macintosh, and Linux

**Programming Languages:** C++, Python, Matlab, HTML, CSS, Java Script

**Applications:** Microsoft Word, Excel and PowerPoint, Excel, JIRA, Git, Git Hub

**Hardware:** Oscilloscope, Function Generator, Digital Multimeter, signal generators, front end simulators, spectrum analyzer, noise figure and network analyzer

**Hardware Interfaces:** PCIe, DDR, I2C, SPI, USB, Ethernet

**Languages:** English and Arabic

## ACTIVITIES

**Vice President,** Engineering club, Hostos Community College, 2016 – 2017

**Member,** Institute of Electrical and Electronics Engineers (IEEE) — 2018- Present