Karim Kabbara

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EDUCATION & CERTIFICATIONS

Bachelor of Science in Computer Science

May 2023

University of Colorado Denver

GPA: 3.56/4.00

Cisco Certified Network Associate (CCNA 200-301)

July 2023

CompTIA Security+ (SY0-601)

June 2023

EXPERIENCE

Embedded Firmware / Software Engineer

September 2023 - Present

Geotech Environmental Equipment, Inc.

Denver, CO

- Utilize JavaScript (Node.js) and Python to program PLCs to read analog and digital input signals from physical devices such as Level Probes, Pressure Transducers, Variable Frequency Drives, and Flow Meters to control system operations using Modbus and Analog / Digital outputs.
- Develop the Geotech website using Python and Angular JS, leveraging MQTT and RESTful APIs to provide customers with real-time access to critical system information, graphical representations of data point trends, IO states, and overall system health, increasing customer satisfaction.
- Apply Agile methodologies to plan, develop, and test every feature of a product, allowing smooth extensibility, high performance, and flawless product quality.

Teacher Assistant

January 2023 – May 2023

University of Colorado Denver

Denver, CO

- Collaborated with a team of two to develop the courses, Computer Security, and Secure Networking and Programming, for the new Cybersecurity curriculum at CU Denver.
- Developed assignments for topics including: an introduction to penetration testing, SQL injections, cloud VM setup using GCP, packet capture and analysis with Wireshark, cryptography, and input validation / sanitization.

Sales Expert

February 2019 – August 2020

Best Buy Parker, CO

- Utilized open-ended questions to provide tailored solutions for clients, resulting in a consistent increase in client satisfaction and a decrease in product return rate.
- Streamlined complete technology solutions for clients, including computer setups, mobile devices, home theater systems, and peripherals, resulting in an increase in revenue generation and client loyalty.

PROJECTS

Network Simulator

- Designed a network simulator, using Python and Tkinter, to create and test network topologies using PCs, switches, and routers.
- Developed a command line interface for implementing device configurations such as IP addresses, default gateways, VLANs, DHCP servers and clients, and static routes.
- Implemented logic for networking concepts including ICMP pings, ARP process, DHCP, and routing.

Brady Public Humanities Archive (Visit: <u>bradyhumanities.org/)</u>

- Collaborated with a 3-person team to develop a digital archive for worldwide humanities projects.
- Implemented website using AWS LightSail, MySQL, Nginx, Django, and the MapBox API.
- Designed features including project submission, an interactive project map, and admin features such as project verification, and overall website management.

SKILLS

Python, JavaScript, TypeScript, Node.js, Modbus, RESTful API, JSON, Embedded Systems, IoT, IIoT, MQTT, Agile, C++, Java, SQL, Linux OS, AWS, GCP, Nginx, HTML, Django, Tailwind CSS, Git, OSI Model, Routing, Switching.