Karim Kabbara

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Parker, Colorado • 720-440-0122

EDUCATION

Bachelor of Science in Computer Science   **May 2023**
University of Colorado Denver   *GPA: 3.56/4.00*

CERTIFICATIONS

CompTIA Security+ (SY0-601)   **June 2023**
Cisco Certified Network Associate (CCNA 200-301)   **July 2023**

PROFESSIONAL EXPERIENCE

Embedded Firmware / Software Engineer   **September 2023 - Present**
Geotech Environmental Equipment, Inc.   *Denver, CO*

- Implement innovative embedded systems for environmental sampling and remediation applications.
- Develop JavaScript code using Node.js to program Programmable Logic Controllers (PLCs), enabling seamless integration of input signals from multiple components and precise control of output signals, optimizing operational efficiency by 20%.
- Conduct in-depth testing of system performance and reliability to ensure flawless product quality.
- Develop and maintain the Geotech website using Python and JavaScript to provide access to critical system information such as uptime, input/output states, and overall system health, allowing remote monitoring and control of systems.

Technical Support   **June 2023 – September 2023**
Adaptive Programs at Cherry Creek Schools   *Aurora, CO*

- Provided technical support to 3 schools, overseeing the needs of over 60 staff members and 150 students; resolved 95% of all IT issues within a 24-hour timeframe, ensuring uninterrupted learning environments.
- Developed a Python-based check-in/out system app to manage and track additional student devices, resulting in a 40% reduction in misplaced devices within the first two weeks of implementation.
- Leveraged Incident IQ Ticketing to promptly resolve tickets, managing support across 3 schools.

Teacher Assistant   **January 2023 – May 2023**
University of Colorado Denver   *Denver, CO*

- Collaborated with a team of two to develop new course material for the classes Computer Security, and Secure Networking and Programming.
- Developed material for topics including: an introduction to penetration testing, SQL injections, cloud VM setup using GCP, packet capture and analysis with Wireshark, cryptography, and validation.

PROGRAMMING PROJECTS

Network Simulator

- Designed a network simulator 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 network concepts including ICMP pings, ARP process, DHCP, and routing.

Brady Public Humanities Archive (Visit: bradyhumanities.org/**)**

- 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.
- Developed features including project submission, an interactive map using MapBox, and admin features such as project verification, and overall website management.

SKILLS

Skills: Python, Tkinter, JavaScript, Node.js, RESTful APIs, JSON, MQTT, C++, Java, Embedded Systems, SQL, Linux OS, AWS, GCP, Nginx, HTML, Tailwind CSS, PHP, Cisco IOS, OSI Model, Routing, Switching.