

# Karim Kabbara

[linkedin.com/in/karim kabbara/](https://www.linkedin.com/in/karimkabbara/) • [karimkabbara00.github.io](https://github.com/karimkabbara00) • [karim.kabbara00@gmail.com](mailto:karim.kabbara00@gmail.com)

Parker, Colorado • 720-440-0122

## EDUCATION & CERTIFICATIONS

### Bachelor of Science in Computer Science

University of Colorado Denver

May 2023

GPA: 3.56/4.00

### Cisco Certified Network Associate (CCNA 200-301)

July 2023

### CompTIA Security+ (SY0-601)

June 2023

## EXPERIENCE

### Software / Embedded Firmware Engineer

September 2023 - Present

Geotech Environmental Equipment, Inc.

Denver, CO

- Develop the Geotech website using Python and AngularJS, providing customers with real-time access to system information and graphical representations of data point trends, leading to a 20% decrease in tech support calls.
- Led the revamping of the Geotech customer website by redesigning the UI that displays all system information and the remote-control commands, leading to a better user experience and clearer system breakdown.
- Utilize JavaScript (Node.js) to program embedded systems that read analog and digital input signals from physical devices to control system operations using serial communication and analog / digital outputs.
- Apply Agile methodologies to plan, design, and test every feature of a product, allowing smooth extensibility, high performance, and flawless product quality.

## PROJECTS

### Classical Music Library

- Developed a comprehensive classical music library website featuring detailed composer profiles, extensive catalogs of their works, and an integrated music player.
- Implemented a searchable and sortable catalog that includes detailed metadata such as title, genre, and song duration for musical works.
- Designed an intuitive user interface using ReactJS to facilitate easy navigation and exploration of composers and their works.
- Leveraged Express.js for the backend, integrated ChatGPT API to generate unique composer descriptions and Google Maps API for composer birthplaces.
- Utilized Supabase for user authentication, Google OAuth, and PostgreSQL database for secure and efficient data management.

### Network Simulator

- Created a Python and Tkinter network simulator for testing network topologies with 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: [bradyhumanities.org/](https://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.
- Designed features including project submission, an interactive project map, and admin features such as project verification, and overall website management.

## SKILLS

Python, JavaScript, TypeScript, ReactJS, AngularJS, Supabase, PostgreSQL, Node.js, Express.js, EJS, RESTful API, Nginx, HTML, CSS, Tailwind, Django, CSS, Git, Embedded Systems, IoT, IIoT, MQTT, Agile, C++, Java, SQL, AWS, GCP.