

Safia Ahmed

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RELEVANT SKILLS

- **Languages:** Python, TypeScript/JavaScript, SQL, C++, C, VHDL, HTML, CSS
- **Tools:** AWS, MySQL, Splunk, Arduino, LTSpice, Intel Quartus, MongoDB, JIRA, Git, GitLab, Linux
- **Frameworks/Libraries:** Spark, Numpy, Pandas, Angular, React, React Native, REST API's
- Proficiency with soldering, PCB assembly, and analog & digital circuits

EDUCATION

B.A.Sc, Computer Engineering, University of Waterloo

Sep 2020 - Present

Relevant Courses: Data Structures and Algorithms (C++), Database Systems, Compilers, Operating Systems (C)

EXPERIENCE

Network Developer Coop Rogers Communications

Jan 2023 - Apr 2023

- Leveraged **Angular framework** to contribute to the development of an interactive web application, enhancing the user experience and ensuring a responsive design.
- **Developed automated lists** using **SQL** eliminating the need for manual data extraction **improving efficiency by 17%** + processed large-scale datasets using big data technologies such as Spark in **Azure**.
- **Designed and implemented JavaScript scripts** to automate the conversion of JSON data from a web app to CSV files (and vice versa), significantly **reducing data processing time** and human error.

Hardware Engineering Coop, Armstrong Monitoring

May 2022 - Aug 2022

- **Debugged PCB boards** using schematics and theoretical circuit knowledge
- **Authorized** test procedures for new products by **analyzing schematics** and writing safety procedures
- Tested products using equipment such as **DMM, oscilloscopes, power supplies**, and **soldered** resistors, capacitors, and through-hole and surface mount components

Electrical Engineering Intern, Rogers Communications

Sep 2021 - Dec 2021

- **Assisted in RF design** of new and existing cell sites as per planning specification and creating radio schematic diagrams to upgrade antenna systems
- **Provided documentation support** for RF designs, **Safety Code 6 submissions** as required.

PROJECTS

FeedForward | Angular, Pandas & Folium Library, TypeScript/HTML/CSS, Python, API's

- Won 1st Place (Best Overall) at the Women in Engineering Hackathon hosted by UWaterloo
- Constructed a CRM platform that utilizes customer data to create a **dashboard (Power BI + Pandas)** and an **interactive admin interface (Angular)** to auto-approve/disapprove candidates and construct optimized routes to deliver packages using the **Google and Routific API's**

Real Time Operating System | C, Intel DE1-SoC board, ARM DS IDE

- Implemented memory management support within the kernel, utilizing the first-fit memory allocation algorithm and designed kernel support for scheduling tasks based on priority and task preemption.
- Developed a mailbox API to facilitate communication between tasks within the system.

Other Projects: React Native app focused on Menstrual Equity: Award winner at Technova Hackathon 2023