Aayaan Naqvi

647-323-9585 | aonenaqvee@gmail.com | [Linkedin](#) | [GitHub](#)

EDUCATION

University of Waterloo — Waterloo, ON
Candidate for Bachelor of Applied Science in Computer Engineering — *Sep. 2022 – Present*

TECHNICAL SKILLS

Languages: JavaScript, Python, SQL, HTML/CSS, C++, VHDL
Technologies: Git, PostgreSQL, RESTful APIs, Figma, Heroku, VS Code, PyCharm
Frameworks: React.js, Node.js, Flask, Tailwind CSS, Electron, Selenium, TensorFlow, Keras

EXPERIENCE

Machine Learning Research Assistant (U.S Department of Energy Funded) — May 2023 – August 2023
Florida International University, EPSi Group — *Miami, FL*

- Single handedly developed a remotely-deployable full-stack application to perform prognostics on battery storage systems using **React.js** and **Electron**.
- Developed a **RESTful API** using **Flask**, **PostgreSQL**, facilitating real-time communication and seamless operations on battery data.
- Fully designed and implemented a set of optimization algorithms to make decisions allocating energy produced by solar arrays using **Python**, resulting in a daily average of **40% increase in profit** over the base control system.
- Researched, trained neural networks to perform real-time battery forecasting using **Keras** and **Tensorflow**.

Lead Organizer — June 2021 – June 2022
Hack the Ridge — *Oakville, ON*

- Effectively led a team of 8 executives, coordinating all event logistics for a local hackathon with 92 participants.
- Took charge of website design, communicated with sponsors to secure $2000 in sponsorships, and used **Figma** and **Canva** to develop all promotional materials.

PROJECTS

Trackr | *Flask, React.js, PostgreSQL, Tailwind CSS*

- Developed a full-stack web app using **Flask** and **React.js** to facilitate easy stock portfolio management for users.
- Implemented a **RESTful API** using **Flask**, leveraging CRUD operations for data management within a **PostgreSQL** database.
- Wrote **CSS** media queries along with **Tailwind CSS** and **React.js** to implement a dynamic UI, reacting to user changes and responsive to various screen sizes.
- Used **Keras**, **Tensorflow** to train a momentum-based LSTM neural network to generate stock price predictions.

Parago | *Javascript, Chart.js, HTML, CSS*

- Developed a chrome extension implementing a twist on the Pomodoro productivity technique using **Javascript**, adding user note-taking functionality, and productivity displays.
- Interfaced with **Chrome API's** to develop a backend which stores, updates, and retrieves data from Chrome's synchronized storage, allowing for extension functionality on multiple devices.
- Prototyped design with **Figma**, and used **HTML** and **CSS** media queries to develop an easy-to-use user interface.

QuickStat | *Python, Tkinter, Selenium, PyGal*

- Designed a basketball analytics tool in **Python** allowing fans to search and interact with graphical displays and statistics for NBA players.
- Web-scraped using **Selenium** to automate data collection, generating interactive radar graphs with **PyGal**.
- Developed a GUI using **Tkinter** for a dynamic user experience.