Jason Zhang

778-898-1619 | jason-zyj.me | jasonyj.zhang@mail.utoronto.ca | github.com/zyjjay | linkedin.com/in/zyj-jason

Education

University of Toronto   Sep 2020 — Apr 2024

Bachelor of Applied Sciences in Computer Engineering – Dean's Honour List (**cGPA: 3.91)**   *Toronto, ON*

Relevant Courses: Data Structures and Algorithms, Operating Systems, Software Design, Digital Systems, Computer Organization

Skills

Languages: C/C++, Python, JavaScript, HTML/CSS, ARM Assembly, Verilog

Technologies: Apache Spark, Seaborn, React, Tailwind, Node.js, Flask, Firebase, PostgreSQL, Git, VSCode

Experiences

Data Science and Engineering Intern   May 2022 — Aug 2022

HSBC   *Toronto, ON*

- Engineered a framework for HSBC to streamline the identification of overlapping data points across hundreds of different investment criteria, resulting in an overall increase in workflow efficiency
- Developed a general-use scoring methodology for converting vendor controversy data to a controversy score for tens of thousands of HSBC-affiliated companies
- Created data visualizations using Seaborn for a white paper documenting research and analysis
- Debugged data pipelines and a proprietary entity-resolution engine hosted on the Hadoop cluster

Project Manager   Jan 2021 — Apr 2021

UofT ESP II   *Toronto, ON*

- Reduced signal to noise ratio of the antenna component of e-Radio inc.'s proprietary communication device to optimize communication between residential smart grid devices and the grid
- Generated and maintained Gantt Charts to provide a timeline for deliverables throughout the design process resulting in improved work efficiency and team dynamics
- Engineered a solution analyzed to be less than **50%** of the original cost requirement in 4 months

Projects

Mappr | Course Project | *C++, OpenStreetMap API, GTK, Git*   April 2022

- Developed a Geographic Information System using the **OpenStreetMap API** and **GTK** toolkit
- Implemented **Dijkstra's** and **A*** algorithms as well as multi-threading to optimize responsiveness of software when user queries for map directions using the GUI

NFTracker | Demo | GitHub | *React, Node.js, JavaScript, Firebase*   January 2022

- Integrated the **OpenSea API** to displays a gallery of NFTs and their prices added by the user for price tracking and bookkeeping purposes
- Used **Firestore Database** to handle stores and deletes of NFTs added by the user
- Utilized custom hooks, reducers, and context to facilitate user authentication and requests to the database

Zenmo | Devpost | GitHub | *React, Node.js, JavaScript, Auth0, HTML/CSS, Bootstrap*   November 2021

- Designed the frontend of a web app that allows users to set up "focus sessions" to promote productivity
- Implemented user authentication through **Auth0** to enable user-specific progress checking and secure routes within the app that required users to be logged in