Tyler Smith

Year 3, Computer Science Major
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Education

University of British Columbia — Vancouver, BC
Bachelor of Science, Computer Science — Sep 2022 – Apr 2027

Work Experience

Full-Stack Developer Intern — Jan 2024 – Oct 2024
Salyx Medical Inc. — *Victoria, BC*

- Refactored **Express** API with asynchronous programming (promises), improving response times by 300%
- Developed web application with **Flask**, securing access for 5 distinct roles and enabling future scalability
- Implemented and maintained a **PostgreSQL** database to protect thousands of sensitive user records
- Standardized API documentation for over 40 endpoints using **OpenAPI** to enable cross-team collaboration
- Implemented two-factor authentication using JSON web tokens and Nodemailer email authentication, reducing risk of unauthorized access and improving user trust

Database Developer Intern — June 2023 – Jan 2024
RR Donnelley — *Warrenville, IL*

- Wrote stored procedures with **MySQL** to automate the processing of millions of rows of client data
- Implemented scripts to convert client data into **XML** format, reducing manual labor by 10+ hours per week and enabling the marketing team to seamlessly generate targeted client mailers
- Participated in weekly Agile stand-up meetings with a 20-member team to communicate progress and resolve blockers, ensuring efficient completion of project milestones

Software Developer Intern — Sep 2021 – Apr 2022
Asgard Data LLC — *Chicago, IL*

- Built dynamic **AWS QuickSight** dashboards to visualize client data, improving stakeholder visibility into key metrics and aiding data-driven decision-making
- Updated and built pages for **React** website, improving user engagement by 26%

Web Developer Intern — Sep 2020 – Apr 2021
Block Bins LLC — *Chicago, IL*

- Designed and implemented responsive web application using **Vue.js** and **Firebase**
- Automated compost pickup requests with the Google Maps API, contributing to a growth of 800+ clients

Projects

OpenGL 3D Game Framework | *C++, OpenGL, GLFW* — May 2024 –

- Designed and implemented data abstractions for entity and environment rendering
- Writing data-serialization tool to save/load 3D environments, allowing for level creation
- Implemented a sphere-triangle collision detection algorithm, enabling user to interact with level geometry

Med Manager | *C++, TypeScript* — May 2023

- Designed and built a medication manager using an ESP32 microcontroller and 3D-printed mechanism
- Developed a TypeScript web server to allow users to configure and manage medication regimens via a user-friendly interface

Quoridor Algorithm | *Python* — June 2022

- Developed an algorithm with two teammates to play the competitive board game Quoridor
- Implemented Minimax with Alpha-Beta Pruning optimization to quickly select the best possible move

Technical Skills

Languages: C, C++, Python, TypeScript, JavaScript/HTML/CSS, SQL, Java
Frameworks/Libraries: OpenGL, Vue.js, Node.js, Express.js, Flask, Nuxt.js, Mocha.js, Chai.js
Tools: Git, GitHub, Linux, Heroku, IntelliJ IDEA, JIRA, Postman, Firebase, MongoDB, PostgreSQL