Isaac James

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Education

Simon Fraser University, Burnaby, BC   Sep 2022-June 2026
BSc Computing Science | Business Minor | 3.97/ 4.33 GPA

- Achieved over 95% in Intro to Programming 1 and 2
- Obtained over 90% in Calculus 1 and Applied Linear Algebra

Work Experience

Software Engineer Intern   May 2023–Sep 2023
Osensa Innovations| Burnaby, BC

- Engineered an advanced RPC system for a cutting-edge IoT Cloud device, using ZeroMQ for seamless socket connections and Protocol Buffers for rapid data transfer and broad language compatibility.
- Pioneered a Python RPC server, leveraging the device's SDK, achieving sub-1 ms overhead and enabling eight concurrent request resolutions through multi-threading.
- Developed a JavaScript/TypeScript NPM client for seamless integration with JavaScript users and an estimated 90% decrease in the lines of code needed to develop nodes in Node-RED.
- Designed custom Node-RED nodes with the JavaScript client to enhance user-friendliness and accessibility.

IT Assistant   Sep 2022–April 2023
Fox Technologies | Burnaby, BC

- Executed the essential tasks of installing network cables and setting up Wi-Fi access points for clients.
- Accumulated valuable hands-on experience and insights into internet infrastructure, along with expertise in computer assembly.

Projects

Battleship AI   Python

- Developed a Python-based Battleship game featuring three progressively sophisticated AI opponents. The most challenging AI employs a probability matrix to optimize its shot selection in each turn.
- The most challenging opponent achieved a 35.5% reduction in shots compared to the medium-level opponent, while the medium-level opponent achieved a 13.9% reduction compared to the easy-level opponent.

Portfolio Site & CRUD App   React | Sass |Firebase

- Designed and crafted a personal portfolio website, doubling as a CRUD (Create, Read, Update, Delete) application.
- Empowered secure access to an admin page, facilitating real-time content updates and effortless content creation for the website.

Currency Exchange App   React | Python

- Created a currency conversion website featuring a React frontend and a Python REST API that web scrapes live forex rates.

JavaScript Calculator   HTML | CSS | JavaScript

- Built a comprehensive calculator that mirrors the functionality of the iOS calculator app when a device is held vertically.

Friends Book   C++

- Implemented a command-line version of a social network, including an optimized profile management system and a user-friendly interface, refining skills in C++ memory management, efficient algorithms, and object-oriented programming.

Volunteering

Childrens Supervisor &Youth Leader   Sep 2020–Present
Cariboo Road Christian Fellowship| Burnaby, BC

- Supervised 10-15 children in the children's ministry, fostering friendliness and providing instruction on a weekly basis.
- Orchestrated and led interactive games for a group of 20 enthusiastic youths at a youth camp.