

Ikenna Okpala

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EDUCATION

Simon Fraser University | Bachelor of Science in Computer Science

Sept. 2021 - Dec. 2024

- GPA: 3.7/4.3
- Relevant Coursework: Data Structures and Algorithms, Software Engineering, Operating Systems, Database Systems

Fraser International College | University Transfer Program in Computer Science

Sept. 2020 - Aug. 2021

WORK EXPERIENCE

Software Engineer Co-op

June - Sept. 2022

CarbonEthic | Vancouver, BC

- Built a production-ready Android App from scratch for the carbon sequestration market leveraging **Kotlin** and Android SDK, contributing to **70%** of the entire codebase.
- Loaded data from a back end once via **RESTful web services** to improve navigation among different screens, decreasing navigation delay by **92%**.
- Designed the app using MVVM **design** pattern and modularization, reducing build time by **50%**.
- Collaborated with an **agile** development team via scrum meetings, **10+** pull requests, and **70+** commits with **written** explanations using Jira for issue tracking and Bitbucket for code collaboration, minimizing back-and-forth communication by **35%**.

TECHNICAL PROJECTS

Stylish

Nov - Dec. 2022

Personal Project | stylish.com

- Deployed a web app, which is a fashion e-commerce site, on Netlify using **JavaScript**, **HTML**, and **React JS** for **user interface development**.
- Developed an inventory storage feature by running a database in the Cloud using Firestore and integrated Firebase Authentication to securely log in users.
- Optimized app performance by reducing website load time by **50%** using Webpack and Babel JavaScript tools.

Tour Quest

Aug - Oct. 2022

Personal Project | tour.quest.com

- Coded a server-side rendered app that allows users to book tours and automated its deployment using Heroku.
- Created **40 RESTful web services** by leveraging **JavaScript**, **Node.js**, and **Express.js** for back-end development and executed API testing for all endpoints using Postman, achieving **95%** test coverage.
- Implemented database storage using **MongoDB** and indexes, reducing data retrieval time by **93%**.
- Improved **security** features by implementing rate limiting to prevent denial of service attacks, data sanitization to prevent injection attacks, and JWT to prevent breached passwords.

The Chase

Feb - Apr. 2022

Course Project | the.chase.com

- Led an **agile** team to develop an arcade-style 2D game using **Java**, receiving an overall grade of **93%**.
- Enhanced gameplay by implementing an algorithm that allows enemies to intelligently chase the player.
- Implemented **unit test cases** using the **JUnit** framework, achieving an **85%** test coverage.
- **Communicated** with team members through design meetings and **wrote** adequate Java documentation for software components.

TECHNICAL SKILLS

- **Languages:** Java | JavaScript | C++ | Python | C | Kotlin | HTML | CSS | SQL | NoSQL
- **Frameworks:** Node.js | Express.js | React JS
- **Developer Tools:** Git | JUnit | Jira | Confluence | MySQL | MongoDB | Android SDK | Firebase | Linux