

PROGRAMMING SKILLS

- **Programming Languages:** C++, Java, C#, TypeScript(JavaScript), Racket, Python, MySQL, L^AT_EX
- **Technologies:** Git, Node.js, React, Microsoft Azure, .NET, Visual Studio Code, Azure Data Studio, Docker

SELECTED WORK EXPERIENCE

- **Web Developer Co-op** Vancouver, BC
BGC Engineering Inc. May 2021 – present
 - Worked as a full stack developer on CambioTM, BGC Engineering's geohazard risk management software using TypeScript, C#, and SQL Server.
 - Refactored the identify Tool service to enable customize features for different clients.
 - Fixed numerous bugs in both front and back end of the Cambio code.
 - Implemented Drawing Widgets on the React Esri Map with addition features on labeling and saving.
- **Teaching Assistant for CPSC121 / CPSC213** Vancouver, BC
Department of Computer Science, UBC Jan 2020 – present
 - Directed labs, tutorials; Held weekly office hours; Assisted over 200 students in understanding course concepts.
 - Held weekly meetings to discuss online teaching issues and ways to improve.
- **CS Tutor** Vancouver, BC
Easy Education Vancouver Sept 2020 - Jan 2021
 - Designed the entire Software Construction tutoring material for college level students, including the UML diagrams, Object-oriented programming knowledge, design principles and design patterns and Debugging. Improved their overall grades from C to A.

SELECTED PROJECTS

- **Flybook (Workspace Application)** Java, JUnit, JDBC, MySQL, IntelliJ Sept-Dec 2020
 - Developed a Java application that simulates work scheduling on meetings while allowing the social networking functionality on an enterprise level.
 - Managed to delete, update, and store all the information using JDBC and MySQL queries.
 - Embedded Aggregation and Division queries to achieve useful functionalities.
- **Insight UBC Query System** TypeScript, Node.js, Mocha, Git, Vscode Sept-Dec 2020
 - Developed a Web application with rest endpoints using TypeScript;
 - Implemented a data controller that can parse HTML and JSON data and a query engine that handles queries in the form of JSON Object.
 - Followed Test-Driven Development process, and wrote Robust tests for both backend and frontend
- **MiniRacket Compiler** Racket Jan-April 2021
 - A Compiler for a subset of Racket to machine language (x86-64 CPU instruction set with Linux system calls). This includes the phase of intermediate representation, code generation and optimization.
 - Wrote Robust Unit tests for each compiling pass.

EDUCATION

- **University of British Columbia** Vancouver, BC
Bachelor of Science, Honors in Computer Science September 2018 – April 2023 (expected)
 - **Grade Average (Cummulative):** 90.8%

AWARDS

- **Trek Excellent Scholarship** 2019/2020
- **Dean's Honor list/ Science Scholar** 2020/2021