



## PROGRAMMING SKILLS

- **Programming Languages:** C++, Java, C#, TypeScript(JavaScript), Racket, Python, MySQL, L<sup>A</sup>T<sub>E</sub>X
- **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
- **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 Instructor** Vancouver, BC  
*Easy Education Vancouver* Sept 2020 - Jan 2021
  - Designed the entire Software Software Construction tutoring material for college level students, including the UML diagrams, Object-oriented programming knowledge, design principles and design patterns. Improved their overall grades from C to A.
  - Inspired students with new idea on the course project. Taught them how to debug on their project.

## 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, IntelliJ Sept-Dec 2020
  - Developed a Web application with rest endpoints using TypeScript; Implemented a query engine that can parse and query UBC courses and room data according to the chosen constraints.
  - Implemented a data controller that can parse HTML and JSON data and a query controller 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