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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, Agile

WORK EXPERIENCE

- **Web Developer Co-op** Vancouver, BC
BGC Engineering Inc. May 2021 – present
 - Working as a full stack developer on Cambio™ project in an agile environment, using TypeScript, C#, and SQL Server.
 - Implementing Sketch Widget with addition features based on the Arcgis Javascript API.
 - Refactored the identify Tool service to enable customized template for different clients.
 - Reduced the JIRA backlog bug ticket by 10%.
- **Teaching Assistant** Vancouver, BC
Department of Computer Science, UBC Jan 2020 – present
 - **CPSC121:** Model of Computation
 - **CPSC213:** Computer Systems
 - **CPSC313:** Computer Hardware and OS
 - Directing tutorials for more than 200 3rd year students; Holding weekly office hours.

PROJECTS

- **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
- **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.
- **MiniRacket Compiler** Racket Jan-April 2021
 - Developed 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
- **Charles and Jane Banks Scholarship** 2021