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## Technical Skills

**Languages:** C++, C, Python, Java, JavaScript, R, HTML/CSS, Racket, ARM Assembly

**Tools/Environment:** Excel, Unix/Linux, Git/GitHub, VS Code, IntelliJ, RStudio, Jupyter Notebook, Node.js

**Frameworks/Libraries:** React, JUnit5, Unittest, Valgrind, Java Swing, Matplotlib, ChartJS

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## Technical Projects

**Strength Tracker** | React, NodeJS, CSS, Data Visualization

May 2023

- **Abstracted software logic** whilst reducing **prop drilling** through utilization of React's **built-in and custom hooks**
- Enhanced **UX** by allowing visualisation of user's strength progress by transforming user's data points into a line graph
- Elevated utility by dynamically including exercise information such as muscles worked and type of training via a **GET request** to a **database**

**Hexagon Maze** | C++, Path Finding Algorithms, Debugging

Mar 2023

- Constructed a HexBoard composed of hexagon tiles in C++ through knowledge of **hexagonal geometry**, **OOP**, and **memory management**
- Debugged memory bugs through Linux native debugging program **Valgrind** to check for memory leaks and dangling pointers
- Supported solutions for every construction of Hexagon maze via a revised implementation of **Dijkstra's** algorithm on an **equally weighted graph**

**WizardsVsZombies Game** | Java, Java Swing, JUnit 5

Oct - Dec 2022

- Reduced **coupling** and increased **cohesion** via utilization of **UML diagrams**, **inheritance** and design patterns such as **Singleton**, **Observer** and **Iterator**
- Implemented 6 user-stories through the **agile scrum development methodology** consisting of 5 two-week sprints
- Ensured test-driven development by deploying **unit and integration testing** across all methods and modules using **JUnit 5**

**Music Data Visualizer** | Python, Data Visualization, Matplotlib, Unittest

Dec 2021

- Successfully plotted how average popularity of songs given proposed tempos changed throughout time via exploitation of **sorting** and **filtration algorithms**
- Effectively **parsed CSV file** with 8,000+ data points into mutable list of song objects, accounting for null field values
- Applied **unit and integration testing** across visualizer functionalities within various cases via testing framework **Unittest**

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## Education & Achievement

**University of British Columbia**

Sept 2021 - Present

*Bachelors of Computer Science and Business*

**Key Courses:** Computations, Programs, and Programming (99%), Introduction to Computer Systems (96%)

**Awards:** International Entrance Scholarship (\$80,000), Outstanding International Student Award (\$20,000)

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## Other Experiences

**President/Founder, AMS Volleyball Club at UBC** | Vancouver, Canada

Dec 2021 - Present

- Established a **structured organization** by recruiting prospective internal members and discussing organizational logistics
- Garnered **150+ paid members** within one year of operation by utilizing promotional resources, social media and networks
- Hosted paid and unpaid events for **100+ members/non-members** by collaborating with internal and external stakeholders

**Assistant Digital Marketing Intern, Coca Cola Company** | Manila, Philippines

July - Sept 2022

- Increased customer engagement of Coke Studio influencers by **55%** by coordinating with various marketing professionals across different regions
- Achieved marketing objectives by creating a **timeline** and allocating responsibilities to various teams prior to Coke Studio concert