Jason Cai
3545 York St, Port Coquitlam, V3B 4A8, Canada

jca465@sfu.ca (778) 957-9896   **Website**: nerv3sine.github.io/   **LinkedIn**: linkedin.com/in/jasoncai7

Education

Simon Fraser University, Burnaby   **Burnaby, BC**
Computer Science 2.95 GPA   May 2024
Coursework: Data Structures/Algorithms, Data Science, Artificial Intelligence, Discrete Math, Statistics/Probability

Experience

Blackbird Interactive   **Vancouver, BC**
Student Programmer – game under NDA   Sep 2022–Dec 2022
  – Developed scalable tools on the Unity Editor with UI designed for game and sound design teams
  – Fixed bugs and updated features caused by outdated implementations
  – Documented usage instructions regarding new design tools for ease of use and future reference
  – QA tested recently announced and released games such as Minecraft Legends and Hardspace Shipbreaker

Robokids Coquitlam   **Coquitlam, BC**
Part-time Contract Instructor   July 2023–Current
  – Guiding small groups of K-8 kids totaling to 20+ kids weekly on tech subjects in STEM subjects covering mathematics, LEGO Mindstorm robotics, and programming such as Data Structures, Python, and C++
  – Contributed to course planning for summer camps covering topics such as SketchUp, Micro-bit, drones, AI ethics, ChatGPT, AI-image generation, and game development

Projects

FoodMatch   **SFU Stormhacks 2021**
Front-end Web Developer   April 2021–Oct 2021
  – Used a combination of JS, HTML, and CSS to develop a user-friendly interface
  – Managed the Notion project planning and communications, increasing team coordination efficiency by 20%
  – Re-architected using a React Ionic framework for modularity, stylistic improvement, and development efficiency

Arknights Character Database   **SFU CMPT 135 Course**
Database Developer   March 2021
  – Architected a dynamic array data structure to store multiple characters' information and allow for efficient memory allocation
  – Engineered custom object classes to store character information and improve the dynamic array sorting efficiency
  – Wrote a separate program with documentation using a selection of C++ libraries to assist with QA testing

Local Network First Person Shooter Game   **Grade 10 IT Course**
Development Lead   Nov 2017–April 2018
  – Solo-developed a fully functional FPS game on the Unity game engine.
  – Assembled basic client-to-client network interactions to allow for multiplayer capability
  – Hosted a fully operational game session allowing up to 18 clients to play the fully released game using the multiplayer server service provided by Unity

Past Your Peak   **Mountain Top Game Jam 2023**
Game Programmer   July 2023
  – Designed a template projectile class system to simplify the creation of projectile prefabs
  – Assisted teammates in learning the Unity game engine and development of other parts of the game (enemies, player, environment interactions)
  – Supported in UX refinement to improve game entertainment and player experience

Skills

Proficient: Unity C#, C++, Python, Git/Terminal, VSCode, Blender 3D, HTML5, CSS, JavaScript, Typescript
Familiar: Python (Pandas),Java, Java(Processing), C, Haskell, MySQL, SketchUp
Novice: PHP, Android Studio, React, Spark, MATLAB (CVX), LaTeX, ML, Rust