Jason Cai

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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- Fixed bugs and updated features caused by outdated implementations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 Coguitlam

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, Al-image generation, and game development

Projects

Local Network First Person Shooter Game

Grade 10 IT Course

Development Lead - Solo-developed a fully functional FPS game on the Unity game engine. Nov 2017-April 2018

- 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 Game Programmer

Mountain Top Game Jam 2023

- Designed a template projectile class system to simplify the creation of projectile prefabs

July 2023

- 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

FoodMatch

SFU Stormhacks 2021

April 2021-Oct 2021

- Front-end Web Developer
- 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
- 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

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