# CRYSTAL HUANG

Computer Science Undergraduate

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Project Demos: https://bit.lv/3ToA00H

# **EDUCATION**

### University of Toronto Scarborough

September 2021 - June 2025

Honours Bachelor of Science, Computer Science Specialist Co-op

- Awards: University of Toronto Entrance Scholarship (\$2000)
- Relevant coursework: Software Design, Introduction to Software Engineering, Software Tools and Systems Programming, Introduction to Theory of Computation

## SKILLS

Languages: Java, C#, C++, Python, SQL, C, JavaScript, Typescript, HTML, CSS

Tools: Git, JUnit, Linux, MySQL, MongoDB, Unity, Bash, Visual Studio Code, Android Studio, Microsoft Azure

### **EXPERIENCE**

### Hackathon Mentor, Marketing team

April 2022 - May 2022

BridgeTO Youth & Amazon, Toronto, ON

- Mentored and assisted around 150 students to create their own music tracks using Python and a simple API as submissions for the Hackathon
- Encouraged students and ensured their understanding of the modules by assisting them with their bugs and technical issues
- Collaborated with the marketing team to promote the event and reach 100s of youth on social media platforms

# **PROJECTS**

### Sports Event Scheduler

July 2022 - August 2022

Sports-Scheduling Android Application

- Collaborated closely with 5 Scrum team members for 2 weeks, hosted daily standup meetings and used Jira to manage progress of project development
- Designed and maintained a Firebase realtime database to store, manage, and authenticate customer data
- . Implemented frontend UI (layers) and backend functionality in Java in order to complete 8 user stories in a short period of time
- Continuously develop and refactor modules in order to improve code reusability and allow extensive unit-testing
- Composed various JUnit tests using Mockito to thoroughly test the application for correctness and code quality

## Mirai Fashion Game

December 2020 - April 2022

### Children's Virtual World MMORPG Project

- Built a game server with a custom TCP/UDP networking solution in C# suitable for 100s of users to be concurrently online
- Created and managed databases with MySQL to properly handle user and in-game data
- Communicated with a team of game and visual designers to developed over 15 total in-game features and systems in C# using
  UnityEngine in order to implement basic functionalities of an Fashion-themed virtual world
- . Used Git to create/merge branches of the project such that version control for game remained clean and manageable

Fantage Emulator July 2019

### Single-player Game

- · Developed a website with a combination of HTML5, CSS, and JavaScript to host an interactive emulation of a game
- Designed and implemented the user interface of the game with HTML5's canvas element and CSS
- Composed JQuery scripts to implement player controller, movement, and other singleplayer features of the game

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