# **COLIN FANG** COMPUTER SCIENCE

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## **Summary of Qualifications**

- Proficient: Java, C, C++, GML, HTML, CSS
- Experience in OOP
- Tools used: Eclipse, PuTTY, PyCharm, Gamemaker Studio 2, Atom
- Soft Skills: Team player, Risk taker, Creative, Fast learner

### **Education**

## **Major in Computer Science**

2018 - present

Western University

## Relevant Experience

C

## **Software Tools and Systems Programming 2211**

2018 September - December

- Familiar with navigating Unix and using Unix commands and editors.
- Experience in using arrays, strings, pointers, double pointers, and structures in **C**.
- Designed **C** code to implement a binary search tree using double pointers.

#### C++

### Object-Oriented Design and Analysis 3307

2019 September - Present

- Team experience with designing a project in an object-oriented approach.
- Prepared UML diagrams and User Stories for a project proposal.
- Used C++ to create a simple file manager.

#### Java

#### **Data Structures and Algorithms 2210**

2018 September - December

- Demonstrated object-oriented programming with inheritance involving implementation of interfaces, extension of parent classes, and dynamic binding.
- Experience with data structures like dictionaries, hash tables, binary search trees, AVL trees, multi-way search trees, (2,4) trees, B-trees, and graphs.
- Thorough understanding of collision handling techniques such as separate chaining, linear probing, and double hashing.

#### **GML**

### Personal Projects <a href="https://github.com/colin-fang/Syndra">https://github.com/colin-fang/Syndra</a> <a href="https://github.com/colin-fang/Syndra">httml</a>

2019 June - Present

- Developed and learned Gamemaker Language through Youtube tutorials from scratch.
- Created a game that implements a basic physics engine, collisions, alarms, sprite animation, viewports, GUI, simple AI, and mouse and keyboard input detection.

### **HTML & CSS**

Personal Website <a href="https://colin-fang.github.io/index.html">https://colin-fang.github.io/index.html</a>

2019 August - Present

- Built personal website with **HTML** and **CSS**.
- Designed website layout and customized visual elements.
- **HTML** friendly version of personal game displayed in browser without the use of physics.