

# COLIN FANG COMPUTER SCIENCE

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## Summary of Qualifications

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- 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

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**Major in Computer Science**  
Western University

**2018 - present**

## Relevant Experience

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### 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 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** [https://github.com/colin-fang/Syndra\\_html](https://github.com/colin-fang/Syndra_html) **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** <https://colin-fang.github.io/index.html> **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.