

# Clarence Chau

☎ [437-996-8528](tel:437-996-8528) | ✉ [clarence.comsci@gmail.com](mailto:clarence.comsci@gmail.com) | [in clarence-chau](https://www.linkedin.com/in/clarence-chau) | [github clarencechau](https://github.com/clarencechau) | [</> clarencechau.com](https://clarencechau.com)

## EDUCATION

### University of Toronto

Sep. 2020 – April 2025

Bachelor of Science – Computer Science, Mathematics and Statistics

Toronto, ON

- Relevant Coursework: Data Structures and Algorithms, Computer Organization and Design, Proofs of Linear Algebra and Matrices, Vector Calculus, Software and Electric Circuits, Software Tools and Systems Programming
- Varsity Badminton (OUA Third Place)

## EXPERIENCE

### Moneris Solutions

May 2023 – April 2024

**Software Developer Intern** | React, Typescript, Java, CSS, SQL

Toronto, ON

- Collaborated with a cross-functional team to architect and rebuild a merchant chargebacks application, improving efficiency, user experience, and code modernity
- Spearheaded front-end development using **React** and **Typescript**, and seamlessly integrated it with a **Java**-based back-end and persistence layers. Utilized tools like SSMS and Postman for efficient **SQL** data manipulation and API testing.
- Committed to software quality by writing unit tests and integration tests, achieving an 80% test case coverage across all application layers

### Aireum

June 2022 – August 2022

**Full Stack Developer Intern** | React, JavaScript, CSS, Firebase

Toronto, ON

- Engineered a full-stack administrative management system using **ReactJS** and **HTML/CSS**, enabling the digital showcasing and publication of Canadian national archive material.
- Contributed to the curation and secure storage of nearly 1 million government-authorized national archive assets, resulting in over \$3MM in fundraising.
- Developed a **Firebase**-backed asset database manipulation tool using a **REST API**, achieving a 70% improvement in update efficiency.

## PROJECTS

### UTimetable | Java, MongoDB

September 2022 – December 2022

- Created a **Java** application for university students to publish their timetable for their friends to see
- Coded an algorithm to compare different user's schedules which prints a schedule of free times slots in a  $O(n \log(n))$  time complexity, 15x faster than a generic  $O(n^2)$  algorithm
- Used **MongoDB** for the back-end, to store the users, timetables, and building locations
- Increased user accessibility by implementing 6 design patterns, along with the 7 Principles of Universal Design

### Personal Website | ReactJS, CSS

October 2022 – November 2022

- Built a personal website to present my personal projects
- Used **ReactJS** components to build the framework and personalized how it looks with **CSS**
- Connected the site to **Formspree** using API calls, for users to easily get in contact with me
- Made the site responsive to the user, detecting 3 different window sizes, including mobile devices, and will resize the formatting accordingly

### Meepo Is You | Python

February 2021 – March 2021

- Coded a grid based puzzle game inspired by Baba Is You
- Used **Pygame API** to wrap the SDL library, easing the development process of the game
- Implemented a **LIFO linked lists** to keep track of adjacent connected blocks, manipulating the rules of the game

### Gungeon | Java

January 2020 – May 2020

- Utilized **Java** and **Greenfoot** to create a dungeon-based shooting game, with different sets of difficulties
- Used of **object oriented programming** to create different types of guns, monsters and dungeon rooms

## TECHNICAL SKILLS

**Languages:** Java, Python, C, SQL, JavaScript, Typescript, HTML/CSS, LaTeX

**Frameworks:** ReactJS, React Native, Node.js, Material-UI, MongoDB, Firebase, Maven, Gradle, Spring Boot

**Developer Tools:** Git, Google Cloud Platform, VS Code, PyCharm, IntelliJ, Eclipse, Postman, SSMS, Greenfoot, Vim

**Libraries:** Bootstrap, React Native Animated, React Hook Form, Prettier, Pygame, Formspree