

Thomas Liu

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EDUCATION

University of Waterloo

Bachelor of Mathematics - Major in Statistics and Computational Mathematics

Waterloo, Ontario

Sep. 2022 – Present

TECHNICAL SKILLS

Languages: C/C++, Python, HTML/CSS, JavaScript: TypeScript, SQL, PowerBI, R, React, C#, DrRacket

Frameworks: Node.js, React.js, Express.js, Bootstrap, JSON, SCSS, JQuery, ASP.NET

Developer Tools: Visual Studio, Git, Excel, Bash, LaTeX, XCode, Linux, Heroku, Netlify, Postman, Insomnia

Database: MongoDB, MySQL

EXPERIENCE

Full Stack Developer

Sep. 2023 - Dec. 2023

SparkLease Inc.

Toronto, ON

- Used **XML**, **CSS**, **JS** to develop **WeChat Mini APP** with engaging layout, robust filter system, and proficient account management functionality
- Utilized **CSHTML**, **CSS**, **JS** to implement both **PC and Mobile Website** with engaging layout, comprehensive filter system, and efficient account management for the company
- Proficient in designing and implementing robust **APIs** using **MVC** architecture to ensure efficient data handling and streamlined user experiences
- Worked closely with database using **SQL** and **Microsoft AZURE** and coming up with algorithm that provides recommendations to users using **C#**

IBM Enterprise Mentorship Program with a focus on Business Analysis

Jul. 2022 - Aug. 2022

IBM and Asian Business and Management Program

Toronto, ON

- Used **IBM Cognos Analytics** to analyze Toronto hospitals' medical supplies
- Analyzed data and made future projection based on the current supplies
- Provided suggestion about the distribution of medical supplies over the entire Toronto region

Vex Robotics

Jul. 2019 - Aug. 2020

Team 905Y

Toronto, ON

- Worked in a team of 4 to compete in **VEX Tower Takeover Challenge**
- Engineered a competitive **robot** with advanced functionalities and precision
- Leveraged **C++** to enable robot to perform excellent functionality and automated tasks
- **13th** in the world for skill related challenge and world finalist

PROJECTS

Snake Game | *Python, Pygame*

Dec. 2022 - Jan. 2023

- Built a **Snake Game** using **Python** built-in functions and **Pygame**
- Improved **UI** and **UX** by customizing pictures and sound effects

Condo Database Management | *C++*

Jan. 2022 - Jun. 2022

- Developed a database that can access and modify all the data that has been stored into the program
- Used self-defined exception class to catch all the error message generated during the program
- Utilized polymorphism and class to increase security to the data stored

Flight Booking System | *C++*

Jan. 2022 - Jun. 2022

- Developed using **C++ OOP** principles: recursion, pointer algorithm, inheritance, exception handling
- Implemented the system logic with the use of STL container and STL algorithms

CERTIFICATE

- CPA: Programming Essentials in C++
- CCNAv7: Switching, Routing, and Wireless Essentials
- CCNAv7: Introduction to Networks
- IBM Enterprise Mentorship Program with a focus on Business Analysis Certificate