





# Yichen Cui

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## Skills

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### Programming Languages:

- **Proficient:** Python, JavaScript, JSX, Java, HTML, CSS, C/C++
- **Competent:** TypeScript, SQL, Bash, C#, PHP, PowerShell

### Libraries & Frameworks:

- React, Vue.js, Bootstrap, Express.js, Socket.IO, axios, MongoDB, Passport.js, JavaFX, .NET, TensorFlow

### Other Tools:

- Git, cron, Linux, nginx, Apache, MySQL, PostgreSQL, MariaDB, MongoDB, Node.js, Certbot, Agile development (Scrum), Linode, Amazon EC2, Android Studio, Gitolite, LaTeX

## Work Experience

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### IT Project Intern — OTT PAY

June 2020 – December 2020

- Worked in a product development team
- Developed an enterprise resource planning website using C#, .NET, and SQL
- Maintained a stock trading website using Java, Vue.js, and MariaDB
- Installed and maintained nginx web servers on Amazon EC2 instances
- Managed Git servers on Amazon EC2 instances using Gitolite

## Projects

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### Minesweeper Online — minesweeper.live

Dec 2020 – Present

- Web game involving real-time data transfer and user authentication
- Front-end built with React and Bootstrap to create a responsive user interface
- Back-end built on Node.js and hosted on an nginx web server
- Used Express.js to create an authentication API with user sessions
- Implemented WebSockets using Socket.IO for real-time game data transfer
- Designed Mongoose schemas to organize data stored in MongoDB
- Encrypted user credentials with bcrypt and installed an SSL certificate to enhance security

### osu!.db Manager — git.io/Jf9ml

May 2020 – Jun 2020

- Lightweight tool to read and download game files, written in Python
- Decoded cached binary game data to authenticate user and request files from the game API

### Super Smash Family Melee — git.io/Jf9ms

Aug 2018 – May 2020

- Two-player platform fighting game for Android, written in Java
- Integrated OOP design patterns such as Factory and Observer to simplify code
- Used Android bluetooth to connect and transfer data between two devices
- Implemented multithreading to manage bluetooth connections while processing gameplay

### Space Rocks — git.io/Jf9m8

Dec 2019

- Multidirectional arcade shooter game for Windows, written in Java with JavaFX
- Collaborated with four classmates using Git and Github for version control
- Used the Model View Controller (MVC) design pattern to organize code

## Education

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### University of Toronto Mississauga Campus

Sep 2018 – Apr 2023

- Computer Science Specialist – GPA 3.44