

## EDUCATION

University of Waterloo | Waterloo, ON

Sep 2019 - Apr 2023

*Bachelor of Computer Science*

• University of Waterloo President's Scholarship (above 90%+ average) • Working towards Economics Minor

### Relevant Coursework

• Algorithm Design and Data Abstraction and Data Abstraction • Object-Oriented Software Development • Data Structures and Data Management • Algorithms • User Interfaces • Operating Systems

## SKILLS

### Languages

• Javascript • Typescript • HTML5 • CSS3 • Python • C • C++ • SQL • R • Bash

### Frameworks / Technologies

• React • Express • Node.js • Next.js • Redux • Firebase • MongoDB • MySQL • Git • Windows • MacOS • Linux

## WORK EXPERIENCE

Connected TV Developer | Toronto, ON

Sep 2021 - Dec 2021

*Accedo*

- Coordinated with SiriusXM client to specify required functionalities for new Xfinity X1 radio streaming application that will offer over **350 full-time channels** to **20.4 million users**
- Migrated existing services from SiriusXM Angular FireTV application to new React application with Accedo's XDK4 software and set up **Redux store** for implementation of live audio and video players, user settings and content tile data fetching
- Implemented **Adobe Heartbeat** and **Adobe Omniture** in new **Samsung TV** application for **CNBC** client to track video session events and page view events for better insights on users' engagement while using the application

Full-Stack Developer | Toronto, ON

Jan 2021 - Apr 2021

*Honeybee Hub Inc.*

- Developed referral system that increased participating studies' user engagement by **300%** over span of one month with **Typescript** on **MERN** stack web application
- Integrated full-stack feature that simplified transfer of cash and gift card rewards through use of **Tremendous API**
- Led agile web development team in implementation of participants' user profile data collection system that allowed for more precise recommended studies and personalized user experience
- Optimized search engine through integration of **MongoDB Atlas Search** aggregation pipeline which improved accuracy of search results by **over 50%**

## PROJECTS

### Python Chess Program

[github.com/vicswu/chess-python-AI](https://github.com/vicswu/chess-python-AI)

- Created classic chess game with dynamic animations using **Pygame** module
- Displayed complete move log and all legal moves for selected pieces
- Incorporated option to play against AI which uses minimax algorithm with adjustable depth to determine optimal move

### MapChat

[github.com/vicswu/MapChat](https://github.com/vicswu/MapChat)

- Developed location-based messaging app with **MongoDB** collection, **Express** server, **React** and **Node.js**
- Allowed users to create public chatrooms on map rendered with **Google Maps API** and to message each other in real time thanks to **Socket.IO**