Sam Orend

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Experience

Backend Developer   *Remote*

Various Clients   *Aug 2017 - Present*

- Design and implement backend solutions to increase productivity and efficiency of processes. E.g. Multi-Sudoku Puzzle Generator for publishing company. Implemented a backtracking **C++ solution** to produce a given number of Sudoku puzzles with built-in final output verification.
- **Reduced draft to final publication time by 12.5 %**. Increased puzzle creation and verification efficiency by **43,000%.**

Frontend Web Developer   *Remote*

Various Clients   *Nov 2017 - Present*

- Create dynamic websites with functional UI/UX Design using **HTML5, CSS3 and React.js**. Create custom **Javascript** components and design effects to client specification.Continuous code maintenance and feature adding.
- Search engine optimization and hosting management. Designer/Developer of: `www.lomic-law.ca`.

City of Kitchener   *Kitchener, Canada*

Instructor/Lifeguard   *Sep 2016 - Aug 2019*

- Worked reliably in a team environment to carry out aquatic services. Collaborating with other instructors to deliver educational content.

Projects

MineBusker

Winner of Ethereum Hacks Waterloo   *2019*

- Created, as a part of a team, a decentralized web3 app for street performers to showcase their performances and offer crypto currency to visitors.
- Integrated web app with **Google Maps API** to optimize location sharing. Worked with Torus to handle crypto login.
- Designed with **HTML5, CSS3, Javascript**. Backend implemented with a custom **Python API, Flask and Javascript** for server side interaction.

Auxify: iOS App   *2019*

- Developed, as part of a collaborative team, an app for managing collaborative, real-time music playlists at social events.
- Tag teamed both the front and backend of the development process. App designed in **Swift**. The backend involved integration of the app and **Spotify API** as well as a **Google Cloud server** hosting playlists. Currently completing publication process.

Table Tennis: iOS App   *2018*

- Individually developed a mobile table tennis game with real physics including multiple difficulty levels, individual and multiplayer options.
- Created over four months using **Swift/SpriteKit**. Recognized at the **Apple Student Developer Showcase.**

Simulated Annealing For Disaster Management

Awarded a Silver Medal at the Waterloo Engineering Fair   *2018*

- Individually developed a console application intended for finding the most efficient path for disaster management relief crews.
- Developed over 5 months in **C++** using simulated annealing and involving file reading and writing.

Quasar, Python Game

Awarded Best Project At SpartaHacks   *2016*

- Developed a **Pygame** application to help teach young children how to write their ABCs and learn penmanship.
- Created a custom scoring mechanism for writing accuracy, and a database to hold a leaderboard of top scores.

Skills

C   C++   Python   Swift   Javascript   React.js   HTML5   CSS3   SQL   PHP   Git

Education

University of Waterloo

Honours Co-Op Software Engineering Class of 2024 – 2019 President's Scholarship of Distinction Recipient   *2019 - Present*

Awards/Achievements

2018	**National Champion**, Canadian Junior National Team Table Tennis Championships		*Burnaby, Canada*
2017	**Team North America**, International Table Tennis Federation Event & Competition		*Markham, Canada*
2016	**Finalist**, Canada Wide Science Fair		*Montreal, Canada*