Career Profile

Talented developer with a passion for computer science, development, problem solving and learning.

Work Experience

Full Stack Developer

April - August 2022

Curvegrid

- Investigated, tested, and implemented solutions in a highly concurrent blockchain application.
- Collaborated extensively with colleagues to redesign UI components.
- Updated features and refactored tests to clean up the codebase.
- Investigated, diagnosed, and solved a long-term memory leak regarding websockets.
- Improved the codebase through many tests, go linter improvements, and code cleanup.

Systems Developer

April - August 2021

- Designed, developed and implemented an employee HR system.
- Managed the project from requirements and specifications to deployment and testing.
- Created a new system in Angular and Express and deployed to a new server.
- Created reporting tools to bridge the system with existing Dynamics and PayWeb applications.
- Wrote a script to import the existing timesheet data into the new system.

Software Tester and Documentation Specialist

July - August 2020

Centre for Community Mapping

- Co-managed the automated testing suite for the company's PHP code base.
- Created documentation for the customer API, increasing customer efficiency and accuracy.
- Refined the automated testing system of the project, adding many major improvements.
- Became very familiar with the WIDE toolkit of software services developed at the UofW.

Developer

October - January 2020

Centre for Community Mapping

- Created a customer data application in VBA to enable customers to transfer their data from excel to the COMAP database.
- Developed a similar application in Google Sheets using the project's HTTP API.
- Tested and used the project's API to help implement a data browser application.

Achievements and Projects

DMOJ Modern Online Judge

January 2021 - Present

- Moderated the site, managing users and responding to user emails.
- Prepared monthly programming contests for the site, and supervised other contests.
- Approved problems for contests and helped out with data generation.
- Contributed to the source code, including an ongoing patch to add a new kernel module.

MAPS Radio Database

September 2021 - December 2021

- Built a Radio Database Management System, leveraging Django Admin.
- Imported existing data to smoothen the transition to the new system.
- Implemented a webhook to link the administrative system to the main site.
- Imported and parsed geographical data to import timezones.

Hack The North 2020++

January 2021

- Created an end-to-end encrypted file storage application with Next.js and Flask.
- Used Sia, a blockchain-powered distributed storage network, to store files.
- Using industry-standard cryptography, implemented encryption in JavaScript.
- Wrote a REST API to communicate with the backend.

RAMP Covid Form

November 2020

- Built a COVID-19 tracing form and hosted it on a website for RAMP, an automation company.
- Created a form frontend in HTML using Google's principles of Material Design.
- Setup a PostgreSQL database and secured remote access to the database for the client.

Supermoms Website Competition

June 2020

• Winner of a website-building competition for a small company.

- Created a fully-functional website in both English and Simplified Chinese in several weeks.
- Integrated the website with Stripe to provide a complete online payment system.

James Robertson Memorial Programming Competition

February 2020

• Won first-place prize in an AI canadian programming competition in Smalltalk. • Wrote several different bot AIs in Smalltalk across 5 rounds.

Keenan Gugeler

Developer

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Proficient In:

- Python
- Django
- Flask
- NGINX
- Go
- SQL
- C/C++
- Linux
- Cryptography
- Concurrent Development

Experienced In:

- Blockchain Development
- Vue.is
- CSS
- JavaScript
- Virtual Machines

Knowledgeable In:

- Express
- Material Design
- Docker

Hobbies



Learning Japanese





Programming Competitions

Education

University of Waterloo

Honours Computer Science September 2020 - Present