Career Profile

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

Work Experience

Systems Developer

April - August 2021

RAMP

- Developed a system to track vacations for employees.
- Developed a system in Angular and Express to track timesheets.
- Created reporting tools to bridge the system with Dynamics and PayWeb.
- 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.
- Worked remotely for the entire summer.

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

MAPS Radio Database

September 2020 - Present

- 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.

DMOJ Modern Online Judge

January 2021 - Present

- Helped administer 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.

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, winning out against a handful of university-level teams.
- Created a fully-functional website in both English and Simplified Chinese in several weeks, with client revisions and modifications.
- 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.
- Co-managed the development with two others to defeat 30 other top teams.

• Placed in the top 2% of high school programmers in Canada in the Canadian Computing

Canadian Computing Olympiad

May 2020

Keenan Gugeler

Developer



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github.com/Riolku

Proficient In:

- Python
- Flask
- NGINX
- Git
- SQL
- C/C++
- Linux

Experienced In:

- Django
- Express
- Angular
- Java
- HTML/CSS/JavaScript
- Material Design
- PHP
- VBA

Knowledge Of:

- C#
- React

Hobbies



Learning Japanese



Reading

Programming Competitions

Education

University of Waterloo

Honours Computer Science September 2020 - Present

Waterloo Collegiate Institute

High School September 2016 - June 2020 Competition three years in a row.

• In grade 12, was invited to an exclusive programming competition for the top 1% of high school programmers in Canada.

Computer Science Club

June 2018 - June 2020

- Built a complete website for my school's Computer Science Club, featuring an attendance and authentication system.
- Wrote and posted several lessons on introductory computer science on the website.
- Led the club for 2 years, teaching over 50 students for over 100 hours.
- Wrote a sandbox in C/C++, working closely with the linux kernel to run arbitrary code securely.