

Lichen Ma

☎ 403-612-6129 | ✉ l67ma@edu.uwaterloo.ca | 🌐 github.com/lma123

Languages and Technologies

- C; C++; Java; JavaScript; XML and JSON Schema; VHDL; Python; HTML; CSS; MATLAB
- Eclipse; Dev-C++; Postman/Newman; Android Studio; Pycharm; KEIL uVision 4

Work Experience

Wireless LAN Engineer / Extreme Networks

May 2018 – Aug 2018

- Developed automated testing scripts which covered the basic and edge case functionality for various API endpoints
- Created a testing approach using Newman to deliver client requests and execute scripts written in JavaScript and JSON
- Analyzed test results using JavaScript assertions and reported bugs to the development team using TestLink

Process Control Systems Engineer / City of Toronto-Toronto Water

Aug 2017 – Dec 2017

- Developed a database of company assets using Wasp Technologies to easily manage existing resources
- Automated the collection and analysis of asset data using Python and delivered monthly reports to managers using FTP
- Generated wireless survey data using Ekahau Technologies to efficiently and accurately provide VoIP services

Process Control Systems Engineer / City of Toronto-Toronto Water

Jan 2017 – Apr 2017

- Programmed switches using Cisco's Command Line Interface to provide network access to Power Distribution Units located in the company's datacenter
- Managed location details for routers and switches using Simple Network Management Protocol and Solarwinds
- Collaborated with the desktop team to rollout the Citrix TWave System and presented the product to Project Managers

Technical Experience

Worldly Goods / MongoDB, Express, React, NodeJS (MERN stack)

Sept 2018 – Present

- Records and analyzes the user's earnings and spendings and provides feedback regarding consumer spending habits
- Utilized Webpack and Axios to connect the React front-end and NodeJS server

Algorithms and Data Structures / C++

Sept 2016 – Present

- Developed parsers, double sentinel linked lists, resizable dequeues, AVL trees, and quadratic hash tables using Dev-C++
- Compiled and tested these programs using the department of Electrical and Computer Engineering's Linux server

Gesture Controlled 2048 / Android Studio

Apr 2017 – Aug 2017

- 2048 game which responds to the vertical and horizontal movements of the user's device
- Developed in Android Studio with Java using the accelerometer to determine the input gesture

Education

Candidate for Bachelor of Applied Science in Computer Engineering / University of Waterloo

Fall 2016 - Present

- Recipient of President's Scholarship for exemplary admission average (90 – 94.9%)
- Related coursework: Electronic Circuits, Algorithms and Data Structures, Engineering Design with Embedded Systems