# Shuhan (Laura) Liu

2A Computer Engineering | University of Waterloo 226-791-8629 | <a href="mailto:s486liu@uwaterloo.ca">s486liu@uwaterloo.ca</a> | <a href="mailto:shuhan-liu.com">Shuhan-liu.com</a>

#### **SKILLS**

- Languages: C++, JavaScript, TypeScript, HTML, CSS, PHP, Python, SQL
- Tools: Node.js, Git, MongoDB, RabbitMQ, MS Azure, AWS, Postman, Jest, Linux
- Libraries & Frameworks: Express, React, Angular, jQuery, Bootstrap

#### **EXPERIENCE**

# **Software Engineering Intern**

MCAP, Waterloo, ON, Canada

September 2019-December 2019

- Developed a single-page mortgage lending application using TypeScript/React and Node.js/Express
- Architected a microservice-based distributed system for the application and managed the back-end data with MongoDB, RabbitMQ and RESTful web services
- Participated in Agile team events such as sprint planning & review, modeling and pair programming
  Web Developer

Purolator, Mississauga, ON, Canada

January 2019-April 2019

- Developed a web application which integrated with IBM Watson and BACA (OCR data extraction) to automatically lift data from bills and reduce the manual work by 80%
- Built a user-friendly interface with form validation using JavaScript/Angular for data reviewing
- Implemented RESTful API endpoints for the web application and database using PHP
- Utilized **Node.js**, **Python** and **AWS Lambda** to create an Amazon Alexa skill which helps users track their package and find the nearest pick-up location by speaking to Alexa mobile APP

## **PROJECTS**

Shuhan-liu.com September 2019

- Built my personal website which has two major features: album and diary
- Created a dynamic photo album on the home page with JavaScript

## **Interval Calculator Project**

October 2018

- Generated the calculating engine of an interval calculator with 19 calculation functions using C++
- Included basic one dimensional and two-dimensional interval operations and some special calculations like intersections and Cartesian Products

### **LEGO Robot Design**

January 2018-April 2018

- Led a group of three people to design the internal code and external structure of a LEGO robot
- Accomplished FIRST LEGO League 2018 missions with excellent teamwork and problem-solving skills

### **INTERESTS**

 Enjoy learning foreign languages and culture: Member of University of Waterloo Culture and Language Exchange Club