

# Jamie Lau

MATHEMATICS • SOFTWARE DEVELOPER

✉ hello@jamielau.me | 🏠 jamielau.me | 🌐 laujamie | 🌐 laujamie5

## Experience

---

### Mentor

Waterloo, Canada

#### STARTERHACKS

Jan. 2020

- Helped teams to develop project ideas and provided insight on how to structure their projects and API's.
- Aided in debugging various full-stack web projects created using Python and Flask.

### CI Investments

Toronto, Canada

#### SOFTWARE DEVELOPER INTERN

Sep. 2019 - Dec. 2019

- Developed a financial report generation API using Java, XSLT, and XSL:FO, which saved the company hundreds of hours in creating professional financial reports for clients.
- Utilized D3.js and PhantomJS to create an API to generate charts of client data, which improved the experience of viewing reports.
- Implemented unit tests using JUnit to validate the API output which saved hours of regression testing for each build.

### AGF Management Ltd

Toronto, Canada

#### WEB DEVELOPER INTERN

Jan. 2019 - Apr. 2019

- Improved security for a web application by developing an HTTP message sender using Java and Spring to utilize the TLS v1.2 encryption protocol.
- Utilized Maven to automate the dependency management and build lifecycle of a project, which helped to save developers hours in manually maintaining project dependencies.
- Spearheaded the creation of an automated test client using Selenium and Java to create integration tests for a mutual funds application.

### Exact Imaging

Toronto, Canada

#### SOFTWARE DEVELOPER INTERN

May. 2018 - Aug. 2018

- Developed an automated integration testing framework using Python and AutoIT to perform end-to-end tests which saved the QA team 20 hours per week.
- Implemented an image recognition algorithm using OpenCV to greatly improve image recognition accuracy.
- Utilized Sphinx to generate automated documentation for the project, allowing developers to save hours in learning how to use the test framework.

## Projects

---

### Book Sharing Application 🔄

#### MONGODB • EXPRESS • REACT • NODE

Feb. 2020

- Created a book tracker application using React that allows users to recommend books.
- Designed a RESTful backend server using MongoDB, Express, and Node to allow for the persistent storage of the book list.

### Sorting Visualizer 🔄

#### TYPESCRIPT • REACT • CSS

Feb. 2020

- Developed a Typescript and React web application to visualize various sorting algorithms.
- Implemented Quick Sort, Insertion Sort, and Bubble Sort.
- Created a continuous integration pipeline using Travis CI to automatically build and deploy to Github Pages.

### Tetris

#### C++

Dec. 2018

- Created a text-based game of two-player Tetris using C++.
- Implemented object-oriented concepts such as the Decorator design pattern, the Visitor design pattern, and multiple inheritance.

## Skills

---

**Languages** Javascript, Typescript, Python, C/C++, Java, HTML, XSLT

**Tools** Git, Travis CI, Vagrant, Jira, Bamboo, Selenium

**Technologies** React, Node, J2EE, Spring, MongoDB

## Education

---

### University of Waterloo

Waterloo, Canada

#### CANDIDATE FOR BACHELOR OF MATHEMATICS

Sep. 2017 - Apr. 2022 (Exp.)

- Double Major in Statistics and Computational Mathematics
- President's Scholarship for Admission Average above 90%.