

ALAIN LOU

ECE, University of Waterloo

Contact

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Technologies

Javascript (Angular, ES6, TypeScript)

Java (Spring Boot, Spring Data, Spring Cloud)

Python (numpy, openpyxl)

C++

KiCad

Awards

2019 Top 10 Overall, Hack Lassonde

2018 1st in Canada, HourRank 31

2018 President's Scholarship of Distinction

2018 Digital Science, SAS Big Data Challenge

2017 Top 50, Sr. Canadian Computing Comp.

Education

B.ASc. CANDIDATE, HONOURS COMPUTER ENGINEERING

University of Waterloo, 2023

- President's Scholarship of Distinction
- GPA: 3.7

Experience

Royal Bank of Canada

Technical Systems Analyst, Online Banking

January - April 2019

- Angular (frontend), Java (backend), MariaDB (SQL database)
- Implemented Redis, Spring Data, Spring Cloud, NgRx technologies
- Online banking UI, backend services (reverse proxy, authentication, pagination), batch jobs

University of Toronto

Research Assistant, Department of Psychology

July - September 2017

- Python (openpyxl, numpy), R, MATLAB
- Data processing and analysis
- Developed additional features for online learning platform (HTML, CSS, JS)

Projects



ShareTO - Top 10 at Hack Lassonde

Winter 2019

Angular, Spring Boot, MongoDB

A geolocation based online marketplace for shareable items and equipment. Leverages Google Maps and Geolocation APIs, using GCP as platform.



BrothFish

Winter 2019

Python

UCI compatible chess engine written in Python, using mini-max with alpha-beta pruning and piece-square tables.



ClimateChangeDB - SAS Big Data Challenge

Fall 2017 - Spring 2018

Java

Used data from Statistic Canada and Environment Canada to calculate best spots for solar farms in Ontario. Our research paper won the Digital Science Award at the STEM Fellowship-SAS Big Data Challenge 2018.



DineSafe - Presented to City of Toronto

Spring - Summer 2017

Android, Java, IBM Cloudant

Uses restaurant inspection data from City of Toronto OpenData to recommend dining options for users.