Felix Zhou

Computer Science | Combinatorics and Optimization Waterloo, ON | felix-zhou.me

linkedin.com/in/felix-zhou | github.com/felix990302

226-898-5226 | cfzhou@uwaterloo.ca

Fluent with C, C++, Python, TypeScript, NodeJS, Git, React Proficient in Java, PostgreSQL, Flask, Scikit-Learn, XGBoost, TensorFlow, Keras Familiar with Haskell, Scheme, SQLAlchemy, Unit Testing

HACKATHONS:

YHacks - Emotion Recognition Web Application

2018

- Leveraged a Deep Neural Network to classify speech in one of five emotional classes with 80% Accuracy through Python
- Implemented the application with full-stack technology including HTML, CSS, JavaScript, and NodeJS framework
- Launched the application via EC2 on a CentOS server

Hack Princeton - Sales and Trading Bot

2017

- Created an automated equity trading bot through the NodeJS framework
- Implemented Facebook Messenger-based GUI using the Azure platform
- Incorporated an existing RESTful API to capture real-time stock market fluctuations

PROJECTS:

Goose Or Not 2018

- Lead a team of 4 in designing and implementing a loosely-coupled full-stack application linked through RESTful API
- Implemented a Flask backend, a Typescript-React web application, and a React-Native mobile application
- Leveraged Decision Trees and Boosting to develop an image classifier which recognizes geese with 90% accuracy
- Deployed through Heroku while incorporating PgBouncer and employing NGINX as a load balancers for performance

SIMP

2018

- Employed the Haskell language to create a dynamically-typed, interpreted, imperative programming language
- Actualized both the parser and interpreter through Pattern-Matching
- Implemented a garbage collector to free unreachable memory

LEADERSHIP:

Associate, Sysadmin | hEDGE Financial Conference

2017-2018

- Planned for guest speakers, workshops, mock interviews, case competitions, and networking sessions
- Maintained the conference website, server, and database for applications and more
- Developed professional communication skills through contacting potential sponsors for partnership opportunities

WORK EXPERIENCE:

Full Stack Developer | Encircle Inc.

2018-2018

- Full-Stack web development with Python, Tornado, TypeScript, CoffeeScript, React, and React-Native
- Implemented in-app email sending function through the Model-Daemon method
- Participated in weekly Sprint meetings within an Agile Scrum framework

Mathematics Teaching Assistant | Kumon Education

2016-2017

- Clarified confusing topics for individual students ranging from basic Arithmetic to introductory Calculus
- Improved communication skills by providing feedback to students aimed to aid their progression in math

EDUCATION:

University of Waterloo

- Candidate for Bachelor's Degree in Computer Science, 2022
- Candidate for Bachelor's Degree in Combinatorics and Optimization, 2022
- 3.97 GPA
- Object-Oriented Programming, Data Structures, Statistics, Calculus III, Linear Algebra II, Quantum Information Processing
- President's Scholarship of Distinction for an entrance average above 95%

ADDITIONAL INFORMATION:

Awards

Dean's Honors List for Fall, Winter terms

2017-2018 2017

Advanced Placement International Diploma for achieving a score of 5 in nine AP exams

2016, 2017

Physics Student of the Year for highest accumulative average and performance in UBC Physics Olympics
Winner of Tournament of Towns Mathematics Contest for a perfect score in the competition

2016

Languages

- Native proficiency in Mandarin
- Professional working proficiency in French