ELIZABETH ZOU

Sport Programmer, Hackathon Fan, & Taekwondo Enthusiast

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EXPERIENCE

Software Engineer Intern Google - gRPC Security

Sunnyvale, CA

May - Aug 2020

- Designed and implemented a Common Expression Language-based authorization engine using customizable role-based access control in the Go language implementation of gRPC, Google's remote procedure call framework
- Added example code for integration into servers using interceptors
- Wrote unit tests and integration tests, integrated into the Travis CI build

Sales & Trading Intern

New York City, NY

Bank of America - Global Rates Electronic Trading

₩ Jan 2020

- Helped develop an investment strategy that seeks to find the optimal change in Bank of America's treasury inventories at any point in time
- Performed data processing and featurization on raw financial data
- Trained machine learning models to generate a signal that represents the optimal position, fed back into the overall optimization problem

Information Security Intern

San Diego, CA

Intuit - Security Research & Development

May - Aug 2019

- Assessed the serverless deployment of Intuit Data Protection Service's Customer Management Database on AWS for security and deployment issues, and provided remediations where applicable
- Documented runbooks and playbooks for managing the service
- Deliverables include a data flow diagram, a threat model/attack map, automated tests, and monitoring/alerting infrastructure design

Software Engineer Intern Microsoft - Xamarin Android

Cambridge, MA

- Created analyzers that screen XML layout files for poorly written code in real-time, with multiple levels of diagnostics and user warning suppression
- Created a series of guick fixes for the analyzers, activated by a simple click
- Added support for a lint.xml file where users can define warning suppression for entire files and override attributes of the analyzers

PROJECTS

Browserbug

♀ IMMA Studio, LLC

Chrome Extension

June 2020 - Present

- Description: A personal companion to inspire healthy habits with intelligently-sent messages from a customizable role model, whether superhero or music idol, in the form of a browser extension and an accompanying webstore to buy browserbug templates
- Role: Co-founder and backend developer

AWARDS & ACHIEVEMENTS

Feb 2020	Top 20 in the U.S. for Google Hash Code
Jan 2019	Battlecode (Al competition) Finalist (Top 16 in the world)
Apr 2017	National Winner of Lockheed Martin Code Quest
Apr 2017	8 th Place out of 8500 high school teams in picoCTF (Capture
	The Flag cybersecurity competition sponsored by CMU)
Mar 2017	Winner of Hewlett-Packard CodeWars
Feb 2017	USA Computing Olympiad Platinum (highest) Division

EDUCATION

Computer Science & Mathematics Massachusetts Institute of Technology

max 2018 - May 2022

GPA: 4.9

COURSEWORK

Linear Algebra • Discrete Math • Probability & Random Variables • Machine Learning • Algorithms • Game Theory • Computation Structures • Computer & Network Security Programming • Software Construction • Game Design • Creating Video Games

SKILLS

Algorithms **Data Structures** Docker OOP Frontend Backend pandas sklearn Flask Bootstrap Jupyter Firebase Android

LANGUAGES

Proficient: Java • Python • Go • C • Bash Familiar: JavaScript • HTML • CSS • C# • Swift • SQL • YAML • XML • MATLAB

Native or Bilingual Proficiency: Chinese

LEADERSHIP

Tech Chair

Battlecode

Feb 2019 - Present ♥ MIT

- Oversees the 5 tech teams: game design, game engine, client, infrastructure, and website
- Elected position

Vice President **Sport Taekwondo**

- Ex-Tournament Coordinator: organized tournament sign ups and travel
- Made web app to ease tournament registration github.com/wflms20110333/EZTourney
- Organized four-day bubble tea fundraiser amassing almost \$1700 in profit
- Choreographed for, participated in, and helped lead the demonstration team
- NCTA All-American & Scholastic All-American