Alexander Y. Liu

331281Georgia Tech Station Atlanta, GA30332-1400

Education

Georgia Institute of Technology

B.S. Computer Science, 2022

GPA: 3.8 Atlanta, GA August 2019 - Present

aliu338@gatech.edu

Website: 2019aliu.github.io

Selected courses: Machine Learning, Artificial Intelligence, Design and Analysis of Algorithms, Computer Vision,
Objects and Design, Computer Organization and Programming (Intro to C / Assembly), Database Systems,
Honors Linear Algebra with Abstract Vector Spaces, Discrete Mathematics, Combinatorics, Intro to Cognitive
Science

Skills

Languages: Java, Python, JavaScript/ES6

Infrastructures and Frameworks: Git, Node.js/V8, React.js, SCSS, WebSocket, MongoDB, Firebase, Keras, Tensorflow

Software: Android Studio, Figma, Jupyter Notebook

Experience

Product Manager and Team Lead

Online

Develop For Good

September 2020 - Present

- Managing a team of designers and developers to create a mobile application to aid distributing resources for the Yemen crisis
- Maintain communication with client to understand the product's specifications
- Technologies used: Figma, React Native

Software Developer Intern

Rockville, MD - remote

May 2020 - August 2020

S&C Electric

- Led the design of backend, implementation, testing, and documentation of an application to monitor and manage 10000+ S&C devices
- Redesigned and implemented backend microservices and proxy to retrieve data from S&C Electric's devices, resulting in complete elimination of excessive data schema and 4x performance gain
- Collaborated with design team to redesign a user-friendly interface, and implemented the interface with React and Electron to streamline and optimize code base
- Technologies used: Java, JavaScript, Redis, Spring Boot, WebSocket, GraphQL, Apollo, React.js, Electron.js

Software Developer Intern

Greenbelt, MD

Fluency Security Corporation

June 2019 - August 2019

- Developed a web-based trouble ticketing system, FasterIncidentResponse, for use at client demonstrations
- Unit tested and documented log management software
- Technologies used: Golang, MongoDB, Bootstrap, Vue.js, Node-RED, Postman, Markdown

Research

 ${\bf Move 2 Music}$

Atlanta, GA - remote

Parikh Lab August 2020 - Present

- Research uses of recurrent neural networks and reinforcement in generating music from video footage of dance

- Using modern encoding techniques and LSTMs to prototype pairing dance video with appropriate music

Migraine Research

Great Falls, VA

Neuroscience Research Lab

June 2018 - January 2019

- Explored two-dimensional materials for inhibition of the critical pathway in migraines
- Employed high-performance CPU cluster and slurm management to increase computation speed
- Research proposal accepted by neuroscience research lab, received guidance and \$2400 funding for project