

Alexander Y. Liu

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2019aliu.github.io

Education

Georgia Institute of Technology

B.S. Computer Science, 2022

GPA: 3.8 Atlanta, GA

August 2019 - Present

- Selected courses: Introduction to Artificial Intelligence, Introduction to Computer Vision, Objects and Design, Computer Organization and Programming, Combinatorics, Honors Linear Algebra with Abstract Vector Spaces, Discrete Mathematics, Statistics and Applications, Macroeconomics

Skills

Languages: Java, Python, JavaScript/ES6

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

Software: Terminal (Linux, Mac), Vim, Android Studio, Figma, Jupyter Notebook

Experience

Be sure to check out my GitHub! You can find here: <https://www.github.com/2019aliu>

• **Software Developer Intern**

Rockville, MD - remote

S&C Electric

May 2020 - August 2020

- Lead the design of backend, implementation, testing, and documentation of an application to view and edit settings of all S&C products, will be used to monitor 10000s of devices
- Make microservices to retrieve data from S&C Electric's devices and to open channels for subscribing to the devices' data, as well as a proxy to unify all microservices
- Build a front end interface for both the web and desktop with React.js and Electron.js, respectively. Collaborated on design with all designers working on this app
- Technologies used: Java, Javascript, Redis, Spring Boot, WebSocket, STOMP, GraphQL, Apollo Server + Client, React.js, Electron.js

• **Software Developer Intern**

Greenbelt, MD

Fluency Security Corporation

June 2019 - August 2019

- Developed a web-based trouble ticketing system, FasterIncidentResponse, using MongoDB-Gin-Vue.js-Golang fullstack framework, and integrated it into existing log management software
- Created developer's guide documentation with Postman, Markdown, and Web Developer tools
- Unit tested log management software with Golang's unit testing framework
- Technologies used: Golang (including Gin server), MongoDB, Bootstrap, Vue.js, Node-RED, Postman

Research

• **Move2Music**

Atlanta, GA - remote

Parikh Lab

August 2020 - Present

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

• **Migraine Research**

Great Falls, VA

Neuroscience Research Lab

June 2018 - January 2019

- **Title:** Exploration of Two-Dimensional Materials for Inhibition of the Calcitonin Gene-Related Peptide Pathway in Migraines
- Employed high-performance CPU cluster and slurm management in collaboration with high school's computer systems lab
- Used ABINIT, an open-source package for making predictions about molecular systems based on solving quantum physics equations.
- Research proposal accepted by neuroscience research lab at high school, received guidance and \$2400 funding for project