

Alexander Y. Liu
9908 Mill Run Drive
Great Falls, VA 22066

(703) 220-5928 (cell)
aliu338@gatech.edu
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, SCSS, WebSocket, MongoDB, Firebase, Keras, Tensorflow

Software: 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
 - Led 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
 - Redesigned and implemented backend microservices and proxy to retrieve data from S&C Electric's devices, resulting in 4x speed up and 99% reduction in the schema used to retrieve data
 - Collaborated with design team to redesign a user-friendly interface, and implemented the interface with newer technologies (React, Electron) to reduce code base size significantly
 - 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 for use at client demonstrations
 - Created developer's guide documentation with Postman, Markdown, and Web Developer tools to aid customer usage of the product
 - Unit tested log management software to find and report bugs in software
 - Drove trucks and wired ethernet cables
 - 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
 - Using modern encoding techniques and LSTMs for proof of concept to pair dance video with an appropriate music
- **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 to increase computation speed
 - Research proposal accepted by neuroscience research lab, received guidance and \$2400 funding for project