Alexander Y. Liu aliu338@gatech.edu

Enthusiastic highest honors graduate with intensive intern experience in and passionate about UI/UX design and AI seeking a career in full stack development, data science, and machine learning engineering

Education

Georgia Institute of Technology Atlanta, GA
M.S. Computer Science – Interactive Intelligence, Expected: Spring 2023 *August 2022 - Present*
- Notable courses: Artificial Intelligence, Data and Visual Analytics, Machine Learning, Deep Learning

Georgia Institute of Technology GPA: 3.83 Atlanta, GA
B.S. Computer Science, Spring 2022 *August 2019 - May 2022*
- Notable courses: Computer Vision, Automata and Complexity, Object-Oriented Design, Computer Organization and Programming in C and Assembly, Database Systems, Honors Linear Algebra with Abstract Vector Spaces, Statistics and Applications, Discrete Mathematics

Experience

- **Graduate Teaching Assistant, Computer Vision** Atlanta, GA
Georgia Institute of Technology *August 2022 - Present*
  - Create and monitor project modeling camera calibration and image stitching for self-driving cars
  - Reinforce concepts from lectures and assist with problem solving and code debugging
- **Software Engineering Intern** Burlingame, CA
Meta *May 2022 - August 2022*
  - Prototyped Text to Speech (TTS) feature for Meta (Oculus) Quest 2 with Android AccessibilityServices, and developed first Kotlin code for Quest 2's UI/UX in the process
  - Collaborated with cross-functional groups to optimize TTS prototype's CPU and memory usage on Quest 2 and produced roadmap for pushing TTS prototype to production
  - Constructed continuous build and continuous integration (CI) pipeline for the Quest 2's Accessibility APK using Facebook BUCK and internal CI tools, reducing deployment time by 50% for AR/VR accessibility features
  - Technologies used: Kotlin, Android SDK, Facebook BUCK, Meta CI/CD
- **Software Engineering Intern** Atlanta, GA - remote
NCR Corporation *May 2021 - August 2021*
  - Built Progressive Web App (PWA) release of NCR's point of sales software, Emerald, improving loading speed by 78% and offline functionality for 1000s of nation-wide grocery chains
  - Implemented proof of concept of cryptocurrency payment for Emerald using the Rinkeby testnet, pushing one of the company's top priorities in blockchain technologies
  - Technologies used: TypeScript, React.js, Figma, IndexedDB, Workbox, Nest.js
- **Undergraduate Researcher** Atlanta, GA
GT FinTech Lab *March 2021 - November 2021*
  - Created web crawler to preprocess 10000s of Federal Reserve (Fed) documents using Selenium and BeautifulSoup
  - Automatically generated topics of Fed meeting agendas with NLP text analysis and generative statistical models
  - Analyzed sentiment of Fed statements to understand Fed opinions of various market sectors using BERT
  - Technologies used: Python, PyTorch, Selenium, BeautifulSoup
- **Software Development Intern** Rockville, MD - remote
S&C Electric *May 2020 - August 2020*
  - Restructured application backend microservices and proxy to monitor and manage 10000s of S&C devices, resulting in 4x performance gain
  - Designed application user interface (UI) in Figma and implemented the UI with React and Electron
  - Technologies used: Java, JavaScript, React.js, Spring Boot, GraphQL, Redis, Figma, WebSocket, Electron.js
- **Software Development Intern** Greenbelt, MD
Fluency Security Corporation *June 2019 - August 2019*
  - Developed a web-based trouble ticketing system, FasterIncidentResponse, for use at client demonstrations
  - Conducted unit tests of log management software in Go (golang), documented software with Postman
  - Technologies used: Go (golang), MongoDB, Bootstrap, Vue.js, Git, Postman, Markdown, Node-RED

Skills

Languages: Python, Java, JavaScript/TypeScript, Kotlin, Golang, SQL, HTML, CSS, Bash

Infrastructures, Frameworks, and Software: Git/Mercurial, PyTorch, Jupyter Notebook/Google Colabratory, Node.js, React.js, Android, Spring Framework, Figma, MySQL, MongoDB, Firebase, Keras, SCSS/SASS, Bootstrap, AWS Cloud Computing, Apache Spark, Sketch