

Steven Liu

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EDUCATION

Georgia Institute of Technology

Atlanta, GA

Bachelor of Science in Computer Science (3.7/4.0)

Aug. 2022 – Dec 2025

- Computer Graphics, Design & Analysis of Algorithms, Intro to Database Systems, Data Structures & Algorithms, Computer Systems and Networking, Perception and Robotics, Linear Algebra

EXPERIENCE

Georgia Tech iOS Club

Jan. 2023 – Present

Tech Lead

Atlanta, GA

- Led and built 3 fully fledged iOS apps in SwiftUI on Xcode and used Firebase & SwiftData for user data store
- Collaborated with UI/UX experts on wireframing apps prototypes and finalizing designs on Figma
- Wrote adaptable cross-device SwiftUI-rendering code conforming to Apple's Human Interface Guidelines
- Wrote the app's full-stack skeleton code that laid out the view hierarchy, data models, and view models
- Reviewed pull requests & fixed code-compilation incompatibilities introduced by MacOS devices' localizations

Co-Founder of EATX

April 2024 - Present

CTO

Atlanta/New York

- Wrote a Google Cloud Function that authenticates users' network requests and fetches user data by Firestore SDKs, loads and runs the pre-trained TensorFlow machine learning model on the data and send back results
- Streamlined the deployment of the machine learning model on an as-needed basis by writing a URLSession network interface to make a POST request to the Google Cloud endpoint with the required user data
- Wrote UserDefaults functions to cache frequently queried user info on the local device
- Mentored in the cohort of 1) Pre-YC Beta University and 2) Gust's Data-Driven Accelerator Program

Scale AI

May 2024

AI Software Engineer

Remote

- Enhanced ChatGPT 3.5 model in breaking down requests and constructing solutions through Reinforcement Learning from Human Feedback (RLHF)
- Wrote case-specific rubric blueprints that GPT 3.5 should follow to generate an ideal response
- Implemented high-quality coding solutions in Swift & SwiftUI to address user-specific optimization problems and iOS mobile application development issues

PROJECTS

Three App | *SwiftUI, Firebase Auth, Firestore, Git, Figma*

Jan. 2024 – Apr. 2024

- Winner of 2024 Spring GT iOS Club's Apps Final Demo Day
- Used NaturalLanguage framework to write a NLTagger function to perform sentiment analysis on tokenized texts
- Wrote in MVVM pattern the skeleton code of frontend, backend, and the Firebase manager
- Implemented a runtime error-handling system to tackle user and network-induced faults

ARM 32-Bit Processor | *CircuitSim, GDB*

Feb. 2024 – Apr. 2024

- Built a CPU datapath that consists of ALU, RAM, the register file, and the interrupt handler using logic gates
- Modeled the finite state machine and designed a microcontroller with 3 ROMs, multiplexers, and state registers
- Wrote a microcode encapsulating 48 finite states of the CPU and integrated the microcontroller into the datapath

Virtual Memory Simulator | *C, Python, GDB*

Feb. 2024 – Mar. 2024

- Simulated a memory management system with 24-bit virtual and 20-bit physical address space
- Wrote a safe virtual-to-physical address translator preventing users from accessing operating system resources
- Wrote FIFO and Clock Sweep policies as page replacement algorithms to handle page faults and the swap space
- Simulated the swap space in a disk by a linked list that stashed evicted pages' data

TECHNICAL SKILLS

Languages/Frameworks: Swift, UIKit, SwiftData, CoreData, NaturalLanguage, MapKit, CoreML, C, HTML/CSS

Databases: Google Cloud, MySQL, Firebase Auth, Firestore, MongoDB

Tools: GitHub, Xcode, Docker, Google Colab, VS Code, IntelliJ