

SAMANTHA HO

610-203-5927 | sho67@gatech.edu | linkedin.com/in/samantha-ho-8a4304196/ | github.com/SamanthaKH95

SUMMARY

- Entry-level Software Engineer candidate with a Master's in Computer Science and professional experience in backend development, OpenAI integration, RESTful API design, UX feature development, and test-driven development.
- Proficient in programming languages such as Python, Java, and C++ with a strong foundation in AGILE development cycles.
- Seeking a Software Engineering role where I can contribute to scalable backend systems or intelligent applications.

EDUCATION

Georgia Institute of Technology

Master of Science in Computer Science, Artificial Intelligence Specialization — GPA: 3.8

Sept. 2021 – May 2024

Remote Campus

Georgetown University

Bachelor of Science in International Business & Marketing, Minors in Computer Science & Korean

Aug. 2014 – May 2020

Washington, D.C

EXPERIENCE

AI Backend Engineering Intern — Physis Investment

November 2023 – January 2024

- Optimized chat response by up to 200% by utilizing AWS SQS & Typescript to create endpoint to queue user chat messages
- Used OpenAI API & Prompt Engineering to process user's natural language & identify relevant functions from codebase
- Designed new data visualization UX feature for chatbot to improve value proposition and improve client demo success rate

Backend Web Development Intern — Compass Coffee

November 2019 – February 2020

- Developed a feature using JavaScript on Node.js to query seasonal inventory/purchasing data from MongoDB database
- Developed REST Endpoint to allow internal web app REST API to access and display results of feature
- Feature displayed inventory life cycles and purchasing data to managers to assist in stocking decisions across 8 locations

Teaching Assistant - OOP with Python — Georgetown University

August 2019 – December 2019

- Assisted professor with live instruction and provided tutoring to complete exit assignments during semiweekly lectures/labs
- Lead weekly office hours to provide one-on-one tutoring to clarify concepts and assist in debugging major projects
- Contributed towards grading efforts for multiple sections of student submissions throughout the semester

Senior Sales Executive — Zoomer Inc.

July 2015 – March 2016

- Created positive revenue streams by acquiring 53 newly partner clients in 5 territories, increased market penetration by 40%
- Onboarded clients onto platform and was responsible for client success through providing tailored consulting services
- Highest performing MDA of 2015, measured by opened sales leads to client conversion ratio, leading to promotion to SSE

PROJECTS

AI Agent To Solve Raven's Progressive Matrices IQ Test | Python, NumPy, OpenCv, Pillow

- **Approach:** Independently implemented an A.I. agent that solves Raven's Progressive Matrices IQ Test with a differentiated, heuristic-based approach that leveraged Computer Vision (OpenCV, Pillow) to replicate a human-like reasoning process
- **Results:** Voted one of top 10 exemplary submissions out of 900 student submissions

Full-Stack Android Application To Rank Data Objects Using AGILE | Java, SQLite, JUnit, Espresso

- **Approach:** AGILE-development cycle group project leveraging SQLite to store/persist single-user data and rank data objects based on user-set comparison weights, resulting in a full-stack app in Android 10.0, API 29
- Implemented Unit and Integration Testing through Junit and Espresso, achieving more than 80% code coverage

Stock Portfolio Optimization Machine Learning Program | Python, SciPy, Pandas, Matplotlib

- **Approach:** Independently implemented an introductory Machine Learning algorithm that leverages SciPy to optimize stock portfolio position allocations based on Sharpe Ratio and historical closing data
- Utilized Pandas to clean data and Matplotlib to visually aid in data analysis efforts

TECHNICAL SKILLS

Programming Languages: Java, Python, C++, Swift, JavaScript, TypeScript, HTML/CSS, SQL, Bash

Testing Frameworks: JUnit, Espresso, Playwright

Developer Tools: AWS SQS, AWS Lambda, OpenAI API, Git, Node.js, Docker

Libraries: NumPy, Pandas, Matplotlib, SciPy, AIF360, Pillow, OpenCV, OpenAI API

Relevant Coursework: Artificial Intelligence, Knowledge-Based Artificial Intelligence, AI Techniques for Robotics

Foreign Languages: Mandarin Chinese (Fluent), Cantonese Chinese (Fluent), Korean (Conversational)