

SOPHIA SHI

sophia_s@mit.edu ◇ Cambridge, MA and SF Bay Area, CA ◇ (510) 361-1068 ◇ linkedin.com/in/sophiashi

EDUCATION

Massachusetts Institute of Technology (MIT)

Expected May 2026

B.S. in Computer Science and Artificial Intelligence; Minor in Management

GPA: 4.6/5.0

Relevant Coursework: Machine Learning, Algorithms/Data Structures, Fundamentals of Programming, Design Thinking & Leadership, Linear Algebra, Discrete Math, Data Science, Managerial Finance & Investments, Optimization, Probability & Statistics, Computer Vision, Natural Language Processing, Dynamical System Modeling & Control Design, Signal Processing

SKILLS

Programming Languages: Python, Java, C++, SQL, React, Typescript, R, HTML, CSS, Javascript, Julia, MATLAB, Kusto

Tools and Other Skills: Git, Jira, Agile, NumPy, Pytorch, Tensorflow, Excel, Product Management

RELEVANT EXPERIENCE

Microsoft

June 2025 - Sept. 2025

AI/ML Software Engineering Intern, Advertising Platform Team

Redmond, WA

- Designed, implemented, and fine-tuned prompts for a GenAI MCP LLM agent that summarizes reliability and latency metrics for ads platforms, reducing the on-call individual's manual workload by 22% and improving internal monitoring efficiency
- Integrated LLM agent to Grafana dashboard backend and migrated advertising data analytics dashboard from PowerBI to Grafana with database queries, enhancing real-time visualization, system scalability, and cross-team accessibility

Goldman Sachs

June 2024 - Aug. 2024

Full-stack Software Engineering Intern, Mortgage Loan Engineering Team

New York City, NY

- Developed backend and frontends for funding workflow platform used by GS Financial Asset Managers on mortgage loans
- Automated process to streamline balance sheet generation, compliance assessments, and communication between departments
- Built RESTful APIs, implemented data schemas and UIs, created an interdepartmental electronic task management system
- Built a collateral valuation solution with Java, Springboot, React, SQL, Python, SingleStore, and Flask, reducing asset managers' admin burden by 36% and saving client time

Aster (start-up)

June 2024 - Dec. 2024

Full-stack Software Engineering and Machine Learning Engineering; Part-time

Remote

- Developed system for drug recommendation using ML, used NLP to synthesize precharting of medical information
- Designed and integrated front-end webpages for ambient documentation with back-end ML models
- Conducted research on state-of-the-art ML models and NLP techniques to scale the platform to a larger user base

MIT Media Lab

Sept. 2023 - May 2024

Machine Learning Engineering; Undergraduate Researcher

Cambridge, MA

- Designed and built generative AI model of Marvin Minsky's musical improvisational style with GANs
- Implemented digitalization of time-series audio data to embed new instruments, allowing one to improvise with Marvin Minsky
- Led signal processing team, developed 85% accurate clustering algorithm for similarity classification betw. audio files

Bloomer Health Tech (start-up)

June 2023 - Aug. 2023

Data Science Intern

Boston, MA

- Developed multimodal ensemble model to detect on-body status of cardiovascular wearables with 99% accuracy
- Performed statistical data analysis on big data, reduced computational power by 63%, decreasing runtime by 5 hours
- Designed, developed, engineered, and deployed software to implement detection model into mobile application via cloud

MIT Computer Science and Artificial Intelligence Lab (CSAIL)

Jan. 2023 - May 2023

Software Engineering; Undergraduate Researcher

Cambridge, MA

- Built deep learning infrastructure that reduced demographic, social, and ethical bias from ureteral stone clinical risk decision scores, achieved 89% accuracy; full development cycle from code review, testing, bug fixing, to API documentation
- Queried and received from various trades and data exchanges of 10000+ rows of raw data from MIMIC-IV database

LEADERSHIP

Sigma Kappa Sorority

Dec. 2023 - Dec. 2024

Vice President of Finance

Cambridge, MA

- Managed all financial transactions of sorority chapter account and house, developed and oversaw annual budget
- Taught and guided members about financial literacy, prepared financial reports and presentations for executive board meetings

INTERESTS

Languages: Native English, Fluent Mandarin, Proficient Spanish — **Interests:** Photography, Pottery, Piano, Half Marathons
Activities and Societies: AI @ MIT, Society of Women Engineers, MINCE (culinary arts)

Awards: Regeneron Science Talent Search (STS) Scholar (2022), Burger King Foundation Scholarship (2022), Regeneron International Science and Engineering Fair Finalist (2022), Yale Science and Engineering Award (2022)