

Steven (Hanqi) Su

🔗 | in | hanqisu@sas.upenn.edu | Portfolio

EDUCATION

University of Pennsylvania, Accelerated M.S.E. in Robotics | Philadelphia, US

Expected May 2026

University of Pennsylvania, B.A. Computer Science + Computational Biology | Philadelphia, US

Expected May 2026

SKILLS

Programming C, Python, Java, JavaScript, Swift, R, SQL, Linux/Unix
DevTools Git, Docker, Docker Compose, Kubernetes, Microservices, Kafka, Flask, FastAPI, Django, NextJS, ReactJS
Data Apache Spark, Apache Airflow, PyTorch, Scikit-Learn, Pandas, Databricks, GCP, AWS, PostgreSQL, MySQL, MongoDB, Firebase, Redis, LangChain, Vector Databases

EXPERIENCE

Grove AI, Software Engineering Intern | San Francisco, CA (Remote)

July 2024 - Present

- Implemented secure, anonymized data migration from production to staging databases using **SQLAlchemy** and **GitHub Actions**, integrating it into the CI/CD pipeline to enable sales demos while ensuring HIPAA compliance
- Leveraged **Holistics** and complex **PostgreSQL** queries to monitor real-time performance of company's LLM agents
- Conducted extensive EDA, feature engineering, and modeling using **Pandas** and **Scikit-Learn** to generate data-driven insights from clinical trial statistics

Penn Medicine Department of Digital Pathology, Research Intern | Philadelphia, PA

June 2024 - August 2024

- Led full-stack dev for TissueLab 🔗, an pathologist-AI collaboration framework, with **Next.js**, **Electron.js**, and **Django**
- Spearheaded application packaging into a cross-platform distributable with **Electron Forge** and **Docker**

Ancient Tech, Software Engineering Intern | Palo Alto, CA (Remote)

May 2024 - August 2024

- Received UPenn's Startup Internship Award, doubled the size of training data for company's Reinforcement Learning for Finance projects by connecting 3 new ticker screeners to **MySQL** in the ETL pipeline of the production codebase
- Utilized Docker, **Selenium**, and **X virtual framebuffer** to deploy Docker images that enable automated browser interactions in Linux-based production servers without graphical user interfaces
- Leveraged **Redis** to enable robust market data caching and persistence and reduce model training time by 30%

SciSketch 🔗, Technical Founder and CEO | Philadelphia, PA

Feb 2024 - Present

- Designed and implemented a backend framework utilizing **Apache Airflow**, **AWS RDS**, and **AWS S3** to automate biomedical image and text scraping, periodic LLM finetuning, and model deployment
- Engineered a text-icon mapping framework through semantic search with **vector databases** and **LangChain**
- Established detached, distributed, and GPU-enabled computing infrastructures that reduce computation time by 70% utilizing **AWS EC2**, **Databricks**, **Spark** and **GCP**
- Used **PyTorch** and Huggingface APIs to fine-tune Google Flan-T5 and produce two custom LLMs, BioPhraser 🔗 and BioRegressor 🔗

Penn Epigenetics Institute, Bioinformatics Researcher | Philadelphia, PA

Sep 2023 - Sep 2024

- Spearheaded development and maintenance of MEAnalysis 🔗, an open-source **R**-package for institute internal use in streamlined analysis of neuron multielectrode array data. Leveraged **Objected-Oriented Programming** paradigm in program design and created 5 novel data visualization methods, reducing manual analysis time by 60%
- Engineered a Next-Gen sequencing data analysis pipeline with R and discovered 3 candidate risk genes for autism

PROJECTS

Underflow 🔗 | FastAPI, Uvicorn, MySQL, Next.js, Github API, OpenAI API

PennApps, Sep 2024

- PennApps **Best Use of Code Generation Challenge Winner**. A command-line tool that scans a codebase and recommends improved tech stack choices for cost savings and performance enhancements
- Set up and integrated MySQL instance and backend **FastAPI** endpoints with command-line and Next.js dashboard
- Integrated **Github API** into the project architecture to enable code scanning of entire repositories

Vision4Science 🔗 | Swift, OpenAI API, Firebase, VisionOS

HackPrinceton, Mar 2024

- The Generative-AI powered Apple Vision Pro app that teaches biomedical researchers how to perform experiments
- Built the VisionPro App with **Swift**, **Reality Composer Pro**, with user data hosted on **Firebase**
- Implemented Generative AI functions through OpenAI API and deployed on Firebase Cloud Functions

COMMUNITY LEADERSHIP

TEDxPenn, Club President | Philadelphia, PA

Aug 2022 - Present

- Leading the world's largest student-ran TEDx platform with more than 1,000 attendees
- Lead a team of 40 for conference logistics planning, speaker and sponsor outreach, and marketing efforts
- Notable speakers include a Nobel Prize in Medicine Laureate, the previous national president of Peru, Director of multiple Marvel films, and Chief Cloud Architect at NVIDIA