PHILENA LIU

2180 Apple Hill Ln, Buffalo Grove, IL 60089 ⋄ philena@mit.edu ⋄ philena1.github.io

EDUCATION

Massachusetts Institute of Technology — *Cambridge, MA*
Major: Computer Science. **GPA: 4.8** — February 2024
Coursework: Algorithms (6.006), Design and Analysis of Algorithms (6.046), Distributed Algorithms (6.852), Machine Learning (6.036), Interconnected Embedded Systems (6.08), Software Construction (6.031), Computer System Engineering (6.033), Stochastic Processes (18.615), Statistics (18.650), Abstract Algebra (18.701), Real Analysis (18.100B), Theory of Computation (18.404), Computation Structures (6.004), Fundamentals of Programming (6.009), Web Programming (6.148)
Extracurricular Activities: HMMT Tournament Director Emeritus, Web Programming class staff (6.9620), Asian Dance Team

Adlai E. Stevenson High School — *Lincolnshire, IL*
SAT Superscore: 1600. ACT: 36. **GPA: 4.0** — May 2020

EXPERIENCE

Lumona (YC W24) — Jan 2024 - July 2024
Technical Co-Founder and CPO — *San Francisco, CA*
· Utilized LLMs and web scraping to build a product discovery site serving recommendations from trusted influencers. Worked on full-stack web development (FastAPI, Qdrant, Supabase, NextJS), mobile development (React Native, Expo), and product design (Figma, Subframe).
· Explored CV object detection models (YOLO, SAM) and multimodal embedding models (ImageBind) for image and video understanding.

Reddit — May 2023 - August 2023
SWE Intern — *New York, NY*
· Reduced an existing service's pod memory usage and heap allocation by nearly 50% through creating a new service for serving preview ads utilizing Kafka, Terraform, Kubernetes, AWS, and Golang.
· Wrote integration tests, created a diagnostic port for debugging, and added relevant metrics viewable on Grafana dashboards.

MIT Web Programming Class (6.9620) — January 2023
Teacher and Treasurer — *Cambridge, MA*
· Lectured and helped run the MIT Web Programming class for over 400 students over the winter term. Taught HTML/CSS, JS, and prototyping in Figma in addition to staffing office hours.
· Developed a collaborative take on a traditional drawing game in 2 weeks using React.js, Google OAuth, Express, MongoDB, Socket.io, Node.js, GitHub, MaterialUI, and CSS after taking the class in 2021.

HMMT — June 2022 - June 2023
Tournament Co-Director — *Cambridge, MA*
· Organized the first in-person tournament since COVID-19 as one of the most prestigious high school competitions in the world with nearly 1000 competitors, including national/international olympiad medalists, from across the globe.
· Managed over 10 officer committees and over 100 staff/volunteers from Harvard, MIT, and CMU.

Gem — June 2021 - August 2021
SWE Intern — *Remote*
· Developed full-stack event form features (custom banner image uploads, improved form validation, automated form submission confirmation emails) using GraphQL, Python, JavaScript, SQL, React.js, and AWS.
· Streamlined user workflow by redesigning and routing the Support Dashboard page, developing additional team-wide setting configurations, and other UI/UX improvements.

AWARDS

1st Place at HackMIT — 2023
· Co-creator of Muse, which utilizes the latest LLMs to offer curated playlists of video snippets to answer any educational question.

9th Place at Math Prize for Girls (MPFG) — 2018, 2019
· Placed 9th out of the top 285 girls in math (2018) and tied for 16th out of 268 (2019) from across US and Canada at the largest math competition for girls in the world.
· Qualified twice for the MPfG Olympiad, a 4 hour proof-based exam.

SKILLS

Technical: Python, ReactJS, NextJS, JavaScript/TypeScript, LaTeX, HTML/CSS, Blender