

HENRY BAO

hb482@cornell.edu | github.com/henry-bao | [linkedin.com/in/henglibao](https://www.linkedin.com/in/henglibao) | (646) 436-6622 | New York, NY

EDUCATION

Cornell University

Master of Science in Computer Information Science; Information System (Dual Deg.), GPA: 3.88/4.00

Aug 2023 - May 2025

New York, NY

University of Washington

Bachelor of Science in Informatics, GPA: 3.83/4.00

Sept 2019 - Jun 2023

Seattle, WA

Honors: Cum Laude, Dean's List Recipient (2020 - 2023)

WORK EXPERIENCE

KPMG US

Software Engineer Intern

June 2024 - Aug 2024

Denver, CO

- Developed a proof-of-concept chatbot from scratch to complement an existing tax tool, improving information accessibility for **10,000+** tax and non-tax personnel across the organization.
- Leveraged LangChain and LangGraph technologies to create a scalable Retrieval-Augmented Generation (RAG) application, integrating with **over 1,000 API endpoints** of the KPMG Fixed Asset Lifecycle Navigator.
- Engineered an AI-driven solution that dynamically selects appropriate API endpoints, gathers necessary parameters from users, executes requests, and summarizes complex tax information for easy comprehension.
- Refactored existing Generative AI chatbot extension for transforming excel data, reducing task process time from an average of **40 mins to under 5 mins** through efficient token management and parallel processing.
- Collaborated with data analysis and consulting groups to identify business needs, product relevance and effectiveness.

NetPrism Inc.

Software Engineer & Co-Founder

Jun 2022 - Oct 2023

Seattle, WA

- Led a startup specializing in user-friendly buyer intelligence application development, with the flagship app, Restock Alerts, a tool for providing real-time stock availability notifications, garnered a user base of **15,000+** across various platforms.
- Enhanced the system with server-side load balancing, asynchronous processing, and priority task queuing, streamlining data extraction, analysis, and processing for **20+** major online retailers and **over 1TB** of e-commerce data on a monthly basis.
- Reduced monthly infrastructure costs by **\$3,400+** via self-managed cellular proxies for web-scraping and open-source services such as a WireGuard overlay network for internal microservice communication, GitLab, and Bitwarden.
- Elevated company valuation to **\$4MM+** by raising pre-seed funding from MiraclePlus (formerly YC China).

University of Washington

Teaching Assistant

Mar 2023 - Jun 2023

Seattle, WA

- Lectured weekly interactive web development sessions, engaging in discussions, hands-on coding example, and real-time problem-solving for **30+** students in React.js, HTML/CSS, and Firebase.
- Mentored **9** project groups through code reviews, iterative project design feedback, and the application of Agile methodologies, resulting in **8 out of 9** of group projects receiving above-average evaluations.

PROJECTS

HomeLab (Self-Hosting)

Mar 2022 - Present

- Engineered and managed a home server using Ubuntu to host personal portfolios, file/photo cloud drives, and Plex media services, integrated with a Synology NAS system for centralized, secure file sharing and automated backups.
- Ensured reliable and scalable orchestration of 20+ diverse applications leveraging Docker containerization.
- Utilized Nginx reverse proxy to host web applications, automated SSL certification and HTTP/HTTPS traffic management.
- Implemented Zero Trust security architecture with Cloudflare DNS for beyond-LAN authentication and remote access.
- Developed Bash scripts for automation, such as backup docker compose files and mirroring new GitHub repos to Gitea.

Vade

Dec 2020 - May 2022

- Developed a Discord bot with automated server moderation and an advanced music playlist system, integrating reaction-to-command functionality to enhance accessibility for users with visual and auditory impairments.
- Engaged with 1,000+ diverse communities through direct outreach and word-of-mouth on Discord, resulting in a user base growth to 300,000 users within 5 months of launch.

SKILLS

Languages: JavaScript, TypeScript, Python, Java, Swift, Golang

Frameworks/Libraries: LangChain, LangGraph, Pandas, React, Next.js, Tailwind CSS, Bootstrap, Express, Puppeteer

Tools/Technologies: Docker, SQL, MongoDB, AWS, DNS, Nginx, Zero Trust, Postman, Linux, GitLab CI