

HUI ZHOU

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EDUCATION

Northeastern University

Seattle, USA

M.S. in Computer Science (GPA: 4/4)

Jan 2023 – Dec 2025 (Expected)

Teaching Assistant: Discrete Structure (fall 2023)

Tohoku University

Sendai, Japan

Ph.D. in Economics (three publications, Teaching Assistant for two semesters)

Oct 2019 – Feb 2023

Recipient of the President's Award (~10 graduates university-wide per year)

EXPERIENCE

FounderWay.ai: AI Engineer Intern

Remote, US | May 2024 - Aug 2024

- Designed and implemented advanced AI logic, focusing on creating and utilizing vector tables from embedding models, enhancing platform functionality with OpenAI functions and tools.
- Optimized data analysis and integration through AI methods, efficiently processing large datasets.
- Stayed updated with AI advancements, contributing to the continuous enhancement of platform features.
- Cross-functional work with product managers, UX/UI designers, and engineers to deliver solutions.

CTI-CodeDay: Software Engineer MicroIntern

Remote, US | Oct 2023 - Dec 2023

- Contributed to Open Energy Dashboard, by verifying the reliability using **Chai** and **Mocha**. ([PR 1079](#))

Research: [First-authored paper](#) in Finance Research Letters

Japan | May 2021 - Dec 2022

- Utilized **Pandas**, **NumPy**, and **Matplotlib** for data manipulation and visualization, applying advanced regression and synthetic control analysis to successfully derive actionable financial insights.

PROJECTS

AsyncTask Scheduler | Collaborated with [Junjie Li](#) | [GitHub](#)

Jan 2024 - Apr 2024

A Go framework of asynchronously scheduling tasks for accelerating data process.

- Implemented task-manager agents and workers with decouple HTTP interfaces using distributed technologies. Included priority scheduling and flexible retry strategies to align with scalable system design best practices.
- Followed loosely coupled table normalization& sharding logic in **MySQL** to enhance query efficiency.
- Performed stress testing and improved performance from 500 QPS to 2000 QPS by using distributed locks and caching with **Redis** and reconfigure the database connection pool.

Real-Time Chat Application | [Github](#)

Aug 2023 - Oct 2023

A real-time messaging app that allows users to send messages.

- Implemented the **MERN** stack, with **React** for frontend and **Node.js** & **Express.js** for backend services.
- Utilized **Zustand** for global state management and **TailwindCSS** and **Daisy UI** for an engaging UI.
- Enabled real-time messaging using **Socket.IO**. Leveraged **MongoDB** for efficient database modeling. Achieved real-time messaging with latency under **100ms**. Secure user authentication using **JWT**.
- Tested API's correctness of 90% coverage using **Jest** and functionality with **Postman**. Deployed in cloud with automated **Git** integration, ensuring **CI/CD** capabilities.

AI-Powered Consulting Analyst | [GitHub](#)

Nov 2023 - Jan 2024

A strategy and financial AI consultant that generates reports on business outlook based.

- Applied **LLaMA-2-7b** as backing analyst **LLM**. To enhance accuracy of business outlook reports, integrated **Retrieval-Augmented Generation (RAG)** framework using previous investment disclosure.
- Fine-tuned for finance-specific tasks and RAG using **Low-Rank Adaptation (LoRA)** to reduce costs.

TECHNICAL SKILLS

Languages: Python, Java, C/C++, C#, SQL, JavaScript, Golang, CSS, HTML, R, STATA

Frameworks & Database: Express, Node, React, Angular, Spring Boot, Flask, MongoDB, PostgreSQL, MySQL, Redis

Developer Tools: Langchain, Git, Docker, AWS, Azure, Gradle, Maven, Redis, Github Actions, Postman, Junit, Pytest

Certifications: Azure AI Engineer Associate