Daniel Hu

danhu@princeton.edu | (732) 666-1418 | danielhu.dev | linkedin.com/in/dy-hu | github.com/dy-hu

EXPERIENCE

GitHub

New York, NY

Software Engineer - GitHub Copilot

Jul 2025 - Present

Datadog

New York, NY

Software Engineer Intern - Language Tools

Jun 2024 - Aug 2024

- Engineered a Go-based build CLI system to replace Ruby legacy tool, reducing codebase by **3,000+** lines and enhancing CI & test automation efficiency.
- Developed a novel codeowner approval metric for two major monorepos, identifying 1,000+ best practice violations.
- Implemented novel Go-based IDE plugin for line-by-line code coverage to enhance programming debugging efficiency across 2,000+ engineers.

Morgan Stanley

New York, NY

Technology Summer Analyst - Counterparty Risk & Margin Data Engineering

Jun 2023 - Aug 2023

- Created new data pipeline and platform using Protocol Buffers, Spring Boot, and Kafka between E*TRADE NoSQL stores and UI, saving 2,000+ lines of code by building upon handlers.
- Proposed and engineered new position object for Real Time Margin to display Wealth Management data for 150,000+ margin clients, engineered using Angular.JS
- Engineered a full-stack embeddings-based chatbot at Morgan Stanley's Inaugural Generative AI Hackathon, leveraging OpenAI's GPT-4 API and leading a team of 8 participants.

Fusion Systems Group

Tokyo, Japan

Software Engineering Intern - Dimare

Jun 2022 - August 2022

- Refactored dimare service and decreased load time by **33**% by implementing application-wide Django/PostgreSQL util formatting methodology and enabling uniform rounding for all tenants.
- Built PDF generation functions in React and Django backend/frontend to query data from PostgreSQL database, creating viewable and accessible data for 1,000+ restaurant locations spanning 6 countries.

EDUCATION

Princeton University

Princeton, NJ

B.A. in Computer Science (Magna Cum Laude), Minor in Cognitive Science

Sep 2021 - May 2025

Relevant Coursework: Distributed Systems, Introduction to Machine Learning, Molecular Machine Learning, Elements of Decentralized Finance, Computer Graphics, Information Security, Advanced Programming Techniques, Algorithms and Data Structures, Reasoning about Computation, Introduction to Programming Systems, Linear Algebra (*= in progress)

National University of Singapore

Singapore, Singapore

B.S. in Computer Science, Exchange Program

Aug 2023 - Dec 2023

PROJECTS

- WorkWell (Django, PostgreSQL, HTML/CSS/JS): Full-stack data storage and recordkeeping tool designed Trenton-based nonprofit to accommodate re-entry of 200+ formerly incarcerated citizens.
- Hoagie Mail (React, Go) Webapp enabling Princeton students to send e-mails to entire 5,000+ undergraduate student body. Service supported 700 e-mails sent per month.
- SocialScout (HTML/CSS, Python) Machine learning and recognition web app designed to flag and identify potentially NSFW content on Twitter using Open Source BS4 Library.

Skills & Achievements

Languages: Java, Python, Go, JavaScript, TypeScript, C, Ruby on Rails, R, C++ IATEX

Technologies: CI/CD, Docker, Kubernetes, Spring (Boot), Django, NumPy, Pandas, React.js, AngularJS, GraphQL, SQL Databases (PostgreSQL, SQL Server), NoSQL Databases (MongoDB, Firebase), Node.js, Swift, jQuery, OpenGL, Git, Bash/Shell

Awards: Horatio Alger Scholar, QuestBridge National College Match Finalist & College Prep Scholar, USA Computing Olympiad Gold Division Qualifier