Daniel Hu

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

EDUCATION

Princeton University Princeton, NJ
B.A. in Computer Science, GPA: 3.8 *Sep 2021 – May 2025*

Relevant Courses: 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*

EXPERIENCE

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 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 efficiency across **2,000+** engineers.

Morgan Stanley New York, NY
Technology Summer Analyst - Counterparty Risk & Margin *Jun 2023 – Aug 2023*
- Created new data pipeline using Protocol Buffers and Spring Boot 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.

MBS Accounting Technology & Advisory New York, NY
Software Engineering Intern *Jun 2021 – Aug 2021*
- Devised an interactive web tool with HTML/CSS/JS to optimize consumers' selection of accounting stacks and technologies, delivered for use by the firm's **150+** clients.

PROJECTS

- **WorkWell** (Django, PostgreSQL, HTML/CSS/JS): Full-stack data storage and recordkeeping tool designed for 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. Placed semifinalist for the Quarter Zero Cup Entrepreneurship competition.

SKILLS & ACHIEVEMENTS

Languages: Java, Python, JavaScript, TypeScript, C, R, LaTeX
Technologies: Spring (Boot), Django, NumPy, Pandas, PostgreSQL, React.js, AngularJS, MongoDB, Firebase, Node.js, jQuery, Git, Bash/Shell
Awards: Horatio Alger Scholar, QuestBridge National College Match Finalist & College Prep Scholar, USA Computing Olympiad Silver Division