

Emily Hsieh

emilyh10@illinois.edu | [LinkedIn](#)

EDUCATION

University of Illinois at Urbana-Champaign | Grainger Engineering

Aug 2022 – May 2026

Major: Computer Science | Minor: Econometrics

GPA: 3.87 / 4.00

EXPERIENCE

Research Assistant | ADAPT @ UIUC

May 2024 - Present

- Implemented a sparse convolutional neural network (SCNN) for auto-tuning SDDMM tensor programs across multiple architectures (CPU, GPU, SPADE).
- Collected data to optimize runtime speedup of SPMM tensor programs based on auto-tuning from SCNN output. Achieved 1.8x runtime speedup for CPU tensor programs from the SCNN output.
- Gained experience with PyTorch and Minkowski Engine.

Engineering IT Consultant | Grainger Engineering IT

Aug 2024 - Present

- Routinely imaged computers (Windows and Linux) to be compatible with university software, handled department poster printing requests, and patched network jacks to solve internet issues.
- Provided both in-person and over-the-phone tech assistance and troubleshooting.

COURSEWORK

Current: System Programming; Artificial Intelligence; Economic Stats; Astrophysics

Completed: Data Structures & Alg.s; Discrete Structures; Alg.s & Models of Computation; Computer Architecture; Probability & Stats; Numerical Methods; Intermediate Microeconomics

PROJECTS

Stock Data Visualization App

Feb 2024

- Built a web application allowing users to search for specific stocks and ETFs, visualize the corresponding price data through time series and candlestick graphs, and view a summary of the company's/firm's mission and history.
- Gained experience in Dash, YFinance, and Plotly.

Airline Ticket Prices Web-scraper Website

Aug 2023 – Dec 2023

- Created a web-scraping algorithm to find airline ticket prices given user-input parameters. Collaborated with teammates to integrate the website frontend with the backend algorithm.
- Gained experience in Selenium, BS4, Flask, and NodeJS.

"Studyholic" Social Study App

Dec 2022 – May 2023

- Developed a messages screen for a mobile app. Part of the Women in CS Dev Ada project cycle, a continuation of the Code Ada hackathon.
- Gained experience in Figma and Flutter.

PROGRAMMING LANGUAGES

Python, C++, C, Java, R, Verilog