

EXPERIENCE

Software Development Engineer Intern

June 2024 — Aug 2024

Amazon

Arlington, VA

- Designed and developed a new back-end API to ensure an upcoming 2025 financial regulation for Gift Cards is reliably enforced
- Initiated collaboration with another team to couple the new compliance check with previous fraud prevention and compliance checks performed on Gift Cards, streamlining the post-checkout process and supporting a future long-term migration initiative
- Effectively summarized low-level design decisions to contextualize development and testing released in each code review, allowing for timely iterative development and planned use of the API in 2025

Data Engineering & AI Intern

June 2023 — Jan 2024

Booz Allen Hamilton

Bethesda, MD

- Led the software development on a cross-functional team to create "PUF-Bot", an AI assistant capable of answering natural language questions about Centers for Medicare & Medicaid Services Public Use Files
- Independently created an initial proof of concept for the chatbot, prompting the team to move from low-code development in Azure/PowerApps to full-stack development with Langchain/Streamlit/Azure
- Conducted part-time research during the school year into bleeding-edge AI developments and their potential to streamline access to healthcare data

Data Science Intern

June 2022 — Sept 2022

Katten Muchin Rosenman LLP

Chicago, IL

- Built upon an existing lexicon (rule) flagger to cut down runtime by 50%
- Created an original "Legal Data Science" Package with easy-to-use functions designed for users with little exposure to data science to independently conduct interactive data analysis
- Delivered a custom-request file search tool that walks through directories and sub-directories to find files matching a certain pattern, allowing attorneys to find documents more efficiently than manually searching through Windows File Explorer

Data Science Course Grader & Teaching Assistant

Sept 2022 - Dec 2023

The University of Chicago

Chicago, IL

- Wrote test cases, debugged, and provided personalized feedback for over 45 coding and free-response assignments/week
- Coordinated with other course staff to establish a fair grading system, relaying common assignment and exam mistakes to professors for incorporation into future lectures and courses
- Answered questions on Ed Discussion and held weekly office hours and lab sessions on Jupyter, Pandas, NumPy, Matplotlib, and statistical concepts / fundamental data structures and Object-Oriented Programming concepts

EDUCATION

The University of Chicago

Sept 2021 — June 2025

Bachelor of Arts in Data Science, Minor in Statistics

Chicago, IL

- Robert Maynard Hutchins Scholar (top 10% of class by end of second year); GPA: 3.92/4.0
- Presented my interactive data portal on UN Security Council Data as a lens to view global conflict, "UN for us", at the Winter Tech Showcase

PROJECTS

"Reversi4u" Reversi Bot

- Independently created a "random", "smart", and "very-smart" bot (n-step look ahead game tree search) to play Reversi
- Collaborated on bot user interface, quality assurance testing, and overall Reversi game logic with three teammates
- Standardized and enhanced group code quality using GitHub Actions workflow to run pylint

"Betting on Certainty" ML Project

- Researched the applications of machine learning models for sports betting arbitrage
- With Premier League soccer data, jointly developed Logistic Regression and Neural Networks models to predict arbitrage opportunities

TECHNICAL SKILLS

- Languages** Python, R, HTML, CSS, SQL, Java
- Libraries** Pandas, NumPy, scikit-learn, nltk, langchain, regex, ipywidgets, Transformers, seaborn, Matplotlib, streamlit, plotly, altair, tmap, folium, Tidyverse
- Technologies** JupyterLab, Git, RStudio, PowerBI, Django, AWS, Azure, PowerApps, Large Language Models