

Education

New York University

Bachelor of Arts, Computer Science, **Minor** in Mathematics

May 2026

GPA: 3.84

Honors: Presidential Honors Scholars Program (Top 10%) | CAS Scholarship (full-ride)

Activities: BUGS@NYU EBoard Member | Tech@NYU Tech Trek Mentor

Relevant Coursework: Data Structures | Basic Algorithms

Experience

Niantic - Incoming Software Engineering Intern

May 2024

BUGS@NYU - Software Developer

Jan 2024 - Present

- Collaborating with a team of 6 to develop a Leetcode Multiplayer open-source platform this semester

Vantage - Software Engineering Intern

July 2023 - Oct 2023

Ruby, Ruby on Rails, JavaScript, HTML, PostgreSQL, Azure, Temporal, Sentry

- Launched Azure Active Resources, a tracking and reporting of Azure resource utilization and costs feature that enables users to filter their Azure spending by resource metadata
- Designed and built a daily Temporal workflow that asynchronously updates ~100,000 records for over 6,500 users by leveraging Azure's REST APIs to fetch data from more than 30 different Azure services
- Integrated a line graph using HTML and JavaScript to display aggregated related resource costs in 30 day periods
- Minimized issues reported by Sentry logs by writing and maintaining 40 unit tests and documented how to add new Azure services for future developers

Projects [\[github.com/xl4624\]](https://github.com/xl4624)

Chess with Friends

Python, Flask, JavaScript, PostgreSQL, HTML, CSS, Docker

- Spearheaded a team of 3 to develop an online Multiplayer chess web application using Flask and Socket.IO to handle asynchronous communication between the server and clients
- Implemented real-time chessboard updates, a chat feature, and a move history table in JavaScript and HTML
- Directed project management efforts by delegating tasks among team members, conducting code reviews, and thoroughly documenting/testing the codebase

Debugging Memory Allocator

C++

- Created a custom memory allocator using C++ that supports malloc, free, and realloc functions while reporting on memory leaks and preventing buffer overflows
- Utilized a linear, sorted free list to manage free memory blocks from the buffer and implemented methods for splitting oversized freed memory blocks and coalescing adjacent blocks for using pointer arithmetic

sudo ku

Go, JSON, HTTP

- Built a CLI web scraper that fetches and parses the latest Sudoku puzzles from [sudoku.au](https://www.sudoku.au) and solves them using a depth-first search backtracking algorithm prioritizing the most constraining cell with the fewest legal moves

COVID-19 Visualization

Python, pandas, Matplotlib

- Analyzed and visualized COVID-19 data from the CDC COVID Data Tracker using pandas and Matplotlib to create a choropleth map that tracks the number of cases and deaths as the pandemic progressed in the US

Skills

Languages: Python, Java, C++, JavaScript/TypeScript, Ruby, HTML, Lua, SQL, CSS, Bash

Frameworks and Libraries: Ruby on Rails, React, Flask, Django, pandas, NumPy, Matplotlib, Node.js, Express

Technologies: Git, Unix, Docker, Azure, AWS(EC2, RDS), Sentry, Temporal, Postman, Vim