

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 | Barbell@NYU Member

Relevant Coursework: Data Structures, Basic Algorithms, Computer Systems Organization

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 for students to compete.

Vantage - Software Engineering Intern

July 2023 - Oct 2023

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

- Launched Azure Active Resources, a tracking and reporting of Azure resource utilization and costs feature that enables users to filter down on 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 documenting how to add new Azure service types.

Projects

[github.com/xl4624]

Chess with Friends

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

- Spearheaded a team of 3 to develop a full stack online chess web application using Flask and websockets to deliver asynchronous board updates between players.
- Implemented a chat feature between players and spectators and a dynamic move history that updates in real-time using JavaScript, HTML, and CSS.
- Directed project management efforts by delegating tasks, conducting code reviews, and documenting/testing the codebase.

Debugging Memory Allocator

C++

- Created a custom memory allocator using C++ that supports malloc, free, and realloc functions, capturing memory leaks and buffer overflows.
- Utilized a linear, sorted free list to manage free memory blocks and implemented methods for splitting and coalescing blocks using pointer arithmetic.

sudo ku

Go, JSON, HTTP

- Built a CLI web scraper that fetches and parses the latest Sudoku puzzles from sudoku.au and solves them using a depth-first search backtracking algorithm.

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 to track the number of cases and deaths in the US.

Skills

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

Frameworks and Libraries Ruby on Rails, React, Flask, pandas, NumPy, Matplotlib, Node.js, PostgreSQL, Express, Django, Bootstrap, Mocha, RSpec

Technologies Git, Unix, Docker, Azure, AWS, Sentry, Temporal, Postman, Vim, Visual Studio Code