

## Education

### New York University

May 2026

Bachelor of Arts, Computer Science, Minor in Mathematics

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