

Xiaomin Liu

xl4624@nyu.edu

linkedin.com/in/xiaomin-liu

Education

New York University

Bachelor of Arts, Computer Science

GPA: 3.8

May 2026

New York, NY

Activities and Honors: Presidential Honors Scholars Program (Top 10%) | CAS Scholarship (full-ride) | BUGS@NYU (Open Source Club) Developer | Tech@NYU Tech Trek Mentor

Relevant Coursework: Data Structures | Fundamental Algorithms (TA) | Operating Systems | Parallel Programming | Programming Languages (Graduate) | Computer Systems Organization

Experience

Niantic - Software Engineering Intern

Java, C#, Unity, Google Cloud Platform, gRPC

May 2024 - Present

Bellevue, WA

- Joining the Pokémon GO: Maps/Explore/AR Team

New York University - Research Assistant

Python, pandas, Google AppSheet, Google Sheets API, Legiscan API

Mar 2024 - May 2024

New York, NY

- Automated the process to add and update legislative bills to Google Sheets, saving 10+ hours of weekly searches
- Increased the number of tracked bills by 175% (from 400 to 1,100) by building a Legiscan API client and a cron-based Python script to retrieve the latest bill information from Legiscan every week

Vantage - Software Engineering Intern

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

July 2023 - Oct 2023

New York, NY

- Launched Azure Active Resources, an Azure resource utilization and costs tracking feature that enables 6,500+ users to cut down on spending by identifying and eliminating inactive resources still incurring costs
- Designed and built a Temporal pipeline that concurrently updates ~100,000 records by leveraging Azure's REST APIs to fetch resource metadata across 30+ different Azure services
- Secured a two year, \$125,000/year contract with our biggest Azure client with the Azure Active Resources release
- Integrated line graphs using HTML, JavaScript, and Chart.js to visualize related resource costs over 30-day periods

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

RCC (Current)

Rust, C, LLVM

- Engineering a C Compiler with a handwritten lexer and recursive descent parser for generating LLVM IR

Chess with Friends

Python, Flask, JavaScript, Socket.IO, PostgreSQL, HTML, CSS, Docker

- Led a team of 3 to develop an online multiplayer chess website where users can challenge others via links
- Implemented real-time updates to the chessboard and move history table using Flask and Socket.IO, and added a chat feature for players to communicate during matches using JavaScript and HTML

Debugging Memory Allocator

C++

- Created a memory allocator in C++ using a linear, sorted free list of metadata headers to manage memory blocks
- Implemented methods for splitting oversized freed memory blocks and coalescing adjacent blocks

Sudoku Solver

Go, JSON, HTTP

- Developed a CLI web scraper that fetches and solves the latest Sudoku puzzles from sudoku.au using a depth-first search backtracking algorithm prioritizing the most constraining cell

Skills

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

Technologies: pandas, NumPy, Ruby on Rails, React, Flask, Django, PostgreSQL, MongoDB, Git, Docker, Azure, Vim

Concepts: Software Engineering, Data Structures and Algorithms, Backend, Full Stack, Web Development, API Development, UNIX Environment, DevOps, Game Development, Compilers, Augmented Reality, Distributed Systems