Xiaomin Liu
xl4624@nyu.edu

linkedin.com/in/xiaomin-liu

Education

New York University   *May 2026*
Bachelor of Arts, Computer Science   **GPA:** 3.84
Honors: Presidential Honors Scholars Program (Top 10%) | CAS Scholarship (full-ride)
Relevant Coursework: Data Structures | Basic Algorithms | Operating Systems | Programming Languages (GA) | Parallel Programming | Data Management and Analysis

Experience

Niantic - Software Engineering Intern   May 2024 - Aug 2024
Java, C#, Unity, Google Cloud Platform
- Joining the Pokémon GO: Maps/Explore/AR Team

New York University - Research Assistant   March 2024 - May 2024
Python, pandas, PostgreSQL, Google AppSheet, Google Sheets API, Legiscan API
- Automated the **adding and tracking of 1,100+ AI-related bills** nationwide for NYU Center on Race, Inequality, and the Law to save more than 10 hours per week of manual searches and provide more accurate status updates

Vantage - Software Engineering Intern   July 2023 - Oct 2023
Ruby, Ruby on Rails, JavaScript, HTML, PostgreSQL, Azure, Temporal, Sentry
- Launched Azure Active Resources, an Azure resource utilization and costs tracking feature that enables 6,500+ users to optimize their Azure spending by identifying and eliminating unused/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 **$125,000** per year, two-year contract with our biggest Azure client to date through the release of Azure Active Resources
- Integrated line graphs with HTML and JavaScript to visualize related resource costs over 30 day periods

Projects   [github.com/xl4624]

RCC (Current)
Rust, C, LLVM
- Building a C Compiler with a handwritten lexer and recursive descent parser, targeting 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 through shareable links
- Implemented real-time updates to the chessboard and move history table after a player makes a move using Flask and Socket.IO and added an chat for players to communicate during a match with JavaScript and HTML

Debugging Memory Allocator
C++
- Developed 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
- Built 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, Lua, SQL, CSS, Bash
Technologies: pandas, NumPy, Ruby on Rails, React, Flask, Django, PostgreSQL, MongoDB, GraphQL, Git, Docker, Azure
Concepts: Software Engineering, Data Structures and Algorithms, Backend, Full Stack, Web Development, API Development, Compilers, Augmented Reality, Distributed Systems, Data Analysis