

Xiaomin Liu

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EDUCATION

New York University

Bachelor of Arts in Computer Science, Minor in Mathematics

May 2026

GPA: 3.8 / 4.0

Coursework: Operating Systems, Deep Learning, Programming Languages, Theory of Computation, Algorithms

Activities: Millennium Discovery 2025 Attendee, Tech@NYU Dev Team Software Engineer

EXPERIENCE

Google

Incoming Software Engineer Intern — Google Cloud NetInfra

Aug 2025 – Nov 2025

Sunnyvale, CA

- Writing C++ traffic eviction algorithms to offload packet processing between SmartNIC hardware and software

Meta

Software Engineer Intern — Structured Data Semantics

May 2025 – Aug 2025

New York, NY

- Working on UPM, a SQL compiler frontend to enable type checking and support Presto and Spark backends

P4 Language Consortium (Google Summer of Code)

Open Source Developer

May 2025 – Sep 2025

Remote

- Developing a custom high-level MLIR dialect using C++ to represent and translate P4 language constructs
- Implemented constant folding and canonicalization passes and upstreamed [bug fix patches to LLVM](#)

NYU Courant

Teaching Assistant

Sept 2024 – Dec 2024

New York, NY

- Managed office hours and graded problem sets and exams for over 100 students in CS 310: Basic Algorithms

Niantic

Software Engineer Intern — Pokémon GO: Maps/Explore/AR

May 2024 – Aug 2024

San Francisco, CA

- Mapped oceans from coastline data with Java & BigQuery, filtering 8 billion unreachable Pokémon spawnpoints
- Reduced Pokémon GO's weather API calls by 78% and saved \$280K/year by excluding updates in ocean tiles
- Wrote a quadtree merging algorithm in Apache Beam that normalized and compressed ocean data by 99.1%
- Integrated Sentry's SDK into Pokémon GO to capture crash analytics, improving app stability for 100M players

Vantage (\$25M Series A, a16z-backed)

Software Engineer Intern

July 2023 – Oct 2023

New York, NY

- Launched [Azure Active Resources](#) on Ruby on Rails to link metadata and enable filtering on \$4M of resources
- Built a fault-tolerant Temporal pipeline that updates over 100,000 PostgreSQL records across 30 Azure services
- Embedded multi-series line graphs into user-facing dashboards with JavaScript to help identify cost trends

PROJECTS

Operating System Kernel | C++, C, x86 Assembly, Python, QEMU

- Built an OS kernel with memory segmentation, interrupt handling, device I/O driver, and minimal C standard lib

SKILLS

Languages: C++, Rust, Python, Java, C, JavaScript, SQL

Technologies: PyTorch, MLIR, LLVM, Temporal, CUDA, gRPC, GCP (BigQuery, Spanner), AWS, Linux

Interests: Systems Programming, Compilers, ML Infrastructure, Distributed Systems, Developer Tooling