

Xiaomin Liu

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EDUCATION

New York University

Bachelor of Arts in Computer Science

Dec 2026

GPA: 3.7 / 4.0

EXPERIENCE

Jane Street

Incoming Software Engineer Intern

May 2026 – Aug 2026

New York, NY

Apple

Incoming Machine Learning Compiler Engineer Intern

Jan 2026 – Apr 2026

Sunnyvale, CA

- Working on the MLIR compiler for the Apple Neural Engine to accelerate on-device AI inference across billions of devices

Google

Software Engineer Intern

Aug 2025 – Nov 2025

Sunnyvale, CA

- Implemented internet flow cache eviction in C++ to offload packet processing to SmartNICs for 300K concurrent flows
- Designed a hybrid LRU/LFU policy that retains long-lived, high-throughput flows while removing stale connections
- Optimized flow eviction with a B-tree multimap buffer of low-scoring candidates, reducing CPU cycles per eviction by 57%

Meta

Software Engineer Intern

May 2025 – Aug 2025

New York, NY

- Built a Python LLM agent with custom tools to help engineers trace data lineage and type propagation in their SQL tables
- Developed a tool to derive a column's semantic types (FBID, IGID, etc.) from raw signals and auto-generate table schemas
- Wrote Hack scrapers and Dataswarm pipelines to process over 10,000 internal posts and comments for training and evals

Niantic

Software Engineer Intern

May 2024 – Aug 2024

Bellevue, WA

- Processed coastline data with Java to generate ocean maps used to filter out 8 billion unreachable Pokémon spawnpoints
- Reduced Pokémon GO's weather API calls by 78% and saved \$280K per year by excluding updates in ocean weather tiles
- Wrote a quadtree merging algorithm in Apache Beam to normalize and compress the geospatial ocean dataset by 99.1%

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

Software Engineer Intern

July 2023 – Oct 2023

New York, NY

- Launched Azure Active Resources, a Ruby on Rails feature that enables filtering on \$4M in cloud resources by metadata
- Developed a fault-tolerant Temporal pipeline that updates 100,000+ PostgreSQL records across 30 Azure services daily
- Embedded multi-series line graphs into user dashboards with JavaScript to visualize cost dependencies in related resources

OPEN SOURCE CONTRIBUTIONS

P4 MLIR Compiler ([p4lang/p4mlir](#)) | C++, MLIR, LLVM, P4

- Built constant folding and canonicalization passes for P4's MLIR backend and upstreamed TableGen patches to LLVM
- Implemented graph optimizations to prune dead parser states and merge linear chains, reducing match-table footprint

SKILLS

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

Technologies: GCP, AWS, PyTorch, MLIR, Temporal, gRPC, Linux, Bash

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