

Xiaomin Liu

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EDUCATION

New York University Bachelor of Arts in Computer Science	Dec 2026 GPA: 3.7 / 4.0
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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 Pokémons spawnpoints	
• Reduced Pokémons 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