

Xiaomin Liu

U.S. Citizen | 347-348-8327 | xl4624@nyu.edu | linkedin.com/in/xiaomin-liu | github.com/xl4624

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 Machine Learning Compiler Engineer Intern	Jan 2026 – May 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 C++ flow cache eviction mechanism for SmartNIC offloading, handling packet processing for 300K flows	
• Designed hybrid LRU/LFU policy with weighted heuristics to retain high-throughput flows and minimize packet reordering	
• 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 fuse linear chains, reducing match-table footprint

SKILLS

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

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

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