Xiaomin Liu

347-348-8237 | xl4624@nyu.edu | linkedin.com/in/xiaomin-liu | github.com/xl4624

EDUCATION

New York University **May 2026**
Bachelor of Arts in Computer Science, Minor in Mathematics **GPA**: 3.8
Coursework: Programming Languages, Machine Learning, Deep Learning, Theory of Computation, Operating Systems

Stuyvesant High School **June 2022**

EXPERIENCE

Google **Aug 2025 – Nov 2025**
Incoming Software Engineer Intern — Google Cloud Networking Infra Sunnyvale, CA
- Developing C++ traffic flow eviction algorithms to offload packet processing between SmartNIC hardware and software

Meta **May 2025 – Aug 2025**
Incoming Software Engineer Intern New York, NY

NYU Courant **Sept 2024 – Dec 2024**
Teaching Assistant New York, NY
- Managed weekly office hours and graded problem sets and exams for 100+ students in CSCI-UA 310: Basic Algorithms

Niantic, Inc. **May 2024 – Aug 2024**
Software Engineer Intern — Pokémon GO: Maps/Explore/AR Bellevue, WA
- Mapped ocean regions to filter out inaccessible Pokémon spawnpoints by processing coastline data in Java and BigQuery
- Reduced Pokémon GO's daily weather API calls by 78% and saved $280K annually by excluding updates in ocean regions
- Developed a quadtree merging pipeline in Apache Beam that normalized and compressed the ocean dataset by 99.1%
- Integrated Sentry's SDK into Pokémon GO's client to capture crash analytics, improving stability for 100M monthly players

NYU Law **Mar 2024 – May 2024**
Research Assistant New York, NY
- Automated the search and tracking of AI-related legislation in databases as part of $500,000 MacArthur Foundation grant
- Developed a LegiScan API client with Python and Pandas running on a weekly cron job to track more than 2,200 bills

Vantage ($21M Series A, a16z) **July 2023 – Oct 2023**
Software Engineer Intern — Azure Integrations New York, NY
- Launched Azure Active Resources on Ruby on Rails to link metadata and enable filtering on $4M worth of Azure resources
- Built a Temporal pipeline that concurrently updates 100,000+ PostgreSQL records across 30 Azure services every night
- Improved UX design by integrating multi-series line graphs with HTML and JavaScript to visualize monthly resource costs

PROJECTS

Nanotorch Python
- Building an autograd engine with dynamic computational graph, akin to Micrograd but using NumPy tensors instead

Operating System Kernel C++, C, x86 Assembly, Python, QEMU
- Built an operating system kernel with memory segmentation, hardware/software interrupt handling, and keyboard driver

Esolang Interpreter and Compiler Rust, Racket, LLVM
- Built a Racket interpreter with static type checking, first-class continuations, and dynamic dispatch for objects
- Wrote a Rust compiler, including its lexer, recursive descent parser, and Abstract Syntax Tree to generate LLVM IR

SKILLS

Languages: C++, Rust, Python, Java, C, JavaScript, TypeScript, SQL, HTML
Technologies: CUDA, PyTorch, gRPC, GCP (BigQuery, Dataflow, Spanner), AWS (EC2, S2, RDS), Linux
Interests: Systems Programming, ML Infrastructure, Developer Tooling, Algorithms