

# Simon Wu

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## Skills

**Languages:** C++, Python, Java, SQL, Go, Dart; **Agents:** Cursor, Claude Code, Codex, CoCo; **Tools:** Bazel, Git, Docker, AWS, GCP, PostgreSQL; **Frameworks:** React, Flutter, Next.js, OpenCV, ONNX Runtime

## Experience

**Software Engineer Intern** Incoming Sept 2026  
Atoms Mountain View, CA

- Details incoming.

**Software Engineer Intern** May 2026 – Present  
Snowflake – SQL Execution Platform, Core Operators Group Menlo Park, CA

- Working on low-level operators for performant query execution on Snowflake's distributed database architecture.

**Software Engineer Intern** May 2025 – Aug 2025  
Squint San Francisco, CA

- Shipped full-stack Smart Calls AI analysis, including mobile app interface. (TypeScript, Dart, Python)
- POCed full voice agent automation of Squint web app through browser automation. (OpenAI, Python)
- Migrated mobile platform datamodels to automatic packaging, removing 10,000+ lines checked-in code. (Dart)

**Software Engineer Intern** Sep 2024 – Dec 2024  
Invision AI Toronto, ON

- Fixed backend pipeline bugs, reducing false alarms and missed train crossing events by 90%. (Go)
- Migrated GitLab CI runner system to use autoscaling instances for >60% cost savings. (AWS, Docker)
- Numerous bugfixes and features to train crossing dashboards and traffic detection alarms. (Python, Go, C++)

**Assistant Engineer Intern** Jan 2024 – Apr 2024  
Huawei Technologies Canada – Data and Privacy Protection Technologies Lab Waterloo, ON

- Implemented anonymization in programmable PII detection and classification engine. (C++, OpenCV)
- Migrated ONNX model inference provider to provide 10x faster inference time. (OpenCV, ONNX Runtime)
- Ported BERT tokenizer to C++ with unit tests for matching behaviour with reference. (C++, Python)

**Assistant Engineer Intern** May 2023 – Aug 2023  
Huawei Technologies Canada – Distributed Data Storage and Management Lab Markham, ON

- Wrote specification and implemented columnar unit compaction with leveling to eliminate B-tree index. (C++)
- Benchmarked and analyzed scaling and performance of key-value stores for database components. (Python)
- Patched foreign data wrapper to achieve 56% greater throughput on random writes. (C++, PostgreSQL)

## Education

**BMath in Computer Science, Combinatorics & Optimization** May 2027 (expected)  
University of Waterloo Waterloo, ON

Coursework: Algorithms, Combinatorial Optimization, Compiler Construction, Cryptography, Data Structures, Graph Theory, Linear Algebra, Numerical Computation, Neural Networks, Object-Oriented Software Development, Operating Systems, Real Analysis