

TECHNICAL EXPERIENCE

Qualcomm, Inc.

Staff Software Engineer

Nov. 2021 — Present

New York, N.Y.

- Compiler developer targeting a multi-threaded VLIW DSP with wide-vector SIMD
- Improved a large set of benchmarks with bandwidth-maximizing LRU scheduling
- Replaced several thousand lines of pattern matching with a generic graph traversal
- Reduced certain high-latency calls by $25\times$ for models with billions of parameters
- Made a compiler lead and a code owner within a year

Reservoir Labs, Inc.

Senior Software Engineer

Jan. 2020 — Nov. 2021

New York, N.Y.

- Lead developer on +\$1M SBIR automating run-time software verification
- Architected and implemented polyhedral compiler integration with TVM
- Wrote non-affine CSE pass that made polyhedral compile time of LLMs feasible

Princeton University, Visual AI Lab

Ph.D. Student

Sep. 2018 — Aug. 2019

Princeton, N.J.

- Achieved two publications in top-tier conferences as a first year Ph.D. student
- Developed debiasing method for vision classifiers that outperformed adversarial debiasing

Columbia University, Graphics Group

Undergraduate Researcher

Jun. 2016 — May 2018

New York, N.Y.

- Derived a knot-untangling optimization based on linking numbers
- Helped pilot a new graduate geometry processing course by creating assignments from research papers

EDUCATION

Columbia University

Bachelor of Science in Computer Science

Sep. 2014 — May 2018

GPA: 3.9/4.0

Select graduate-level coursework: ML, PL, OS, Quantum Computing, Algebraic Topology, Databases, PDE, Modern Algebra, Differential Geometry, Probability

Honors & Awards: Thompson-Muñoz Scholar, Tau Beta Pi, Engineering Honors Society, Dean's List of Distinguished Students, all semesters

Teaching Assistant: Linear Algebra, Computer Animation, Digital Geometry Processing, Intro to Combinatorics and Graph Theory

SKILLS

Languages: C, C++, Python, Java, Rust, OCaml, Matlab, JS, SQL

Software: PyTorch, TensorFlow, Cuda, TVM, Glow, OpenMP, Gurobi, Mosek, LibIgl, Eigen, Git, Mercurial, GDB, Valgrind, Cachegrind, Mathematica, Unix, PreForm, Docker, Slurm, Flame Graphs, \LaTeX

PUBLICATIONS

Zeyu Wang, **Klint Qinami**, Yannis Karakozis, Kyle Genova, Prem Nair, Kenji Hata, and Olga Russakovsky. Towards fairness in visual recognition: Effective strategies for bias mitigation. In *IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, 2020.

Kaiyu Yang, **Klint Qinami**, Li Fei-Fei, Jia Deng, and Olga Russakovsky. Towards fairer datasets: Filtering and balancing the distribution of the people subtree in the imagenet hierarchy. In *ACM Conference on Fairness, Accountability and Transparency (ACM FAccT)*, 2020.