Klint Qinami

klintqinami.github.io linkedin.com/in/klint-qinami

Nov. 2021 — Present

New York, N.Y.

TECHNICAL EXPERIENCE

Qualcomm, Inc.

Staff Software Engineer

- 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

- 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

- 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

 ${\it Undergraduate\ Researcher}$

- 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	Sep. 2014 — May 2018
Bachelor of Science in Computer Science	GPA: 3.9/4.0
Select graduate-level coursework: ML, PL, OS, Quantum Computing, Algebraic Top	ology, Databases, PDE, Modern
Algebra, Differential Geometry, Probability	
Honors & Awards: Thompson-Muñoz Scholar, Tau Beta Pi, Engineering Honors Socie	ety, Dean's List of Distinguished
Students, all semesters	
Teaching Assistant: Linear Algebra, Computer Animation, Digital Geometry Process	sing, 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, Acountability and Transparency (ACM FAccT)*, 2020.

Jan. 2020 — Nov. 2021 New York, N.Y.

Sep. 2018 — Aug. 2019 Princeton, N.J.

Jun. 2016 — May 2018 New York, N.Y.