Apple — Machine Learning Research Scientist

- Model Optimization Lead, Video Computer Vision (Science). Serve as the bridge between
 foundation model research teams and product implementation, overseeing optimization
 workflows for Apple Intelligence on-device LLMs (research post: optimization).
- ♦ Technical Gatekeeper for model releases, applying QLoRA, quantization, and cross-format model conversions to enable on-device deployment. Established verification systems ensuring consistent performance across multilingual and multimodal use cases from research to product.

Education

PhD in EECS, UC Berkeley (2023)

Active member of BAIR (Berkeley AI Research) and BiD (Berkeley Institute of Design) labs. Research: human-computer interaction, AIML, developer tools, computer vision, graphics. BS & MS in ECE/CS, University of Rochester Cum laude, high distinction.

Experience

Apple (2023 →) — ML Research Scientist, SIML - Apple Intelligence Model Optimization
Apple (2020, 2021) — Research Scientist Intern, Artificial Intelligence/Machine Learning
Adobe (2019) — Research Scientist Intern, Creative Intelligence Lab
Autodesk (2018) — Research Scientist Intern, User Interface Group

Technical Skills

Machine Learning & AI — PyTorch, JAX, Adapter finetuning (QLoRA), Quantization techniques, Multi-modal model evaluation, Apple Neural Engine on-device optimization ML Operation — Distributed training/evaluation, Kubeflow pipelines, ML telemetry & observability, Model visualization tools, CI/CD for robust ML workflows and model delivery Languages & Tools — Python (expert), Rust, TypeScript, Ruby, LATEX, Unix, Docker

Teaching

2020, 2017 Head GSI for CSC 160, User Interface Design and Development **2019** Head Graduate Student Instructor for CSC 169, Software Engineering

Research

See the full publication list (20+ papers) in Google Scholar.

CHI 2024 Generating Automatic Feedback on UI Mockups with Large Language Models CHI 2024 Rambler: Supporting Writing With Speech via LLM-Assisted Gist Manipulation ICML 2023 Interactively Optimizing Layout Transfer for Vector Graphics UIST 2023 Interactive Flexible Style Transfer for Vector Graphics IUI 2023 SlideSpeecs: Automatic and Interactive Presentation Feedback Collation

Special Recognition

 ${\bf 2023}\,$ Google-Berkeley AI Research (BAIR) Commons Grant

2022 University of California, Berkeley EECS Departmental Fellowship

2016 NSF Graduate Student Fellowship Program, Honorable Mention