Evan Kriminger

Software Engineer

evankriminger@gmail.com
github.com/ekrim
ekrim.github.io

SUMMARY

Senior engineer with a PhD in ML and 7 years of production C++ experience. Specialized in low-latency, resource-constrained systems, embedded ML, and hardware accelerated inference. Writes clean, efficient, and reliable code with experience shipping robust features at scale.

SKILLS

Languages: **C++17** (daily professional use), **Python** (previous roles)
ML & Numerics: PyTorch; LLM inference (working knowledge); ARM NEON, CUDA

EXPERIENCE

Senior Software Engineer, Apple Inc. - Cupertino, CA Nov 2018 – Apr 2025

- Shipped all-day, low-power, low-latency **CoreMotion** features to billions of Apple Watch, iPhone, and Mac devices.
- Implemented machine learning, vision, and estimation algorithms for embedded systems with constrained memory and compute. Profiled and optimized with hardware-accelerated math.
- Architected motion's presence on new hardware including: threading model, embedded data storage, and inter-chip comms. Lead cross-functional efforts to bring up sensor streams.
- Optimized codebase to free memory for new features. Debugged and eliminated excess CPU wakes to save all day battery life.
- Designed and owned SPIs used by internal clients of CoreMotion. Contributed to and triaged for the public CoreMotion API.

Senior Machine Learning Engineer, ZestFinance - Los Angeles, CA Oct 2017 – Nov 2018

- Implemented ML papers, such as normalizing flows, variational autoencoders, and integrated gradients in PyTorch and TensorFlow, for credit scoring, data generation, and outlier detection.
- Architected Python explainability library for trees and neural network models.

Machine Learning Engineer, Leap Motion - San Francisco, CA Feb 2016 - Aug 2017

- Conducted computer vision and machine learning research for real-time hand tracking, hand-object interaction, and visual odometry.
- Wrote cloud-based ML training pipelines with PyTorch and TensorFlow.

Research Assistant, University of Florida - Gainesville, FL Sep 2010 - Dec 2015
Computational NeuroEngineering Laboratory, Advisor: Dr. José C. Príncipe

- Conducted research in unsupervised learning, reinforcement learning, and signal processing.

EDUCATION & PUBLICATIONS

Ph.D Electrical and Computer Engineering, University of Florida Fall 2015
B.S. Engineering Science, University of Miami Spring 2009
13 peer-reviewed publications and **9 U.S. patents** (see personal website)