

# Evan Kriminger

Software Engineer

evankriminger@gmail.com

<https://github.com/ekrim>

## SUMMARY

Senior systems engineer with a PhD in ML and 7 years of production C++ experience. Specializes in low-latency, resource-constrained systems, embedded ML, and hardware-accelerated inference. Known for clean, efficient, and correct code with an eye for shipping robust features at scale.

## SKILLS

Languages: **C++17** (daily professional use), **Python** (current tooling use)

Numerical acceleration (ARM NEON, CUDA), neural networks (implementation, training), Linux, Git

## 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 making space 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 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.

**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 issued U.S. patents** (see personal website)