Shayan Sadigh

Location: Santa Clara, CA
Email: ssadigh.contact@gmail.com
Github: https://github.com/shayanpersonal (200+ stars)
Work Status: U.S. Citizen

Summary

- AI Engineer / Tech Lead | Previously @Amazon SageMaker
- Placed top-10 in $1.5 million Kaggle competition. Designed and trained 200 million parameter MVCNN-Attention neural network for threat recognition on 3D body scans. (Slides)
- Authored "checkered subsampling" deep learning research paper, published PyTorch code. (arXiv)

Work Experience

Aurascape.ai
Founding Engineer, Agentic AI (Feb. 2024 - Sept. 2025)

- Presented demos and co-authored three patents (pending) which helped secure $12.8 million funding.
- Developed agentic web traffic analyzer for generating firewall signatures, multimodal content classifiers for content filtering, and agentic web browser implementing set-of-marks prompting. (arXiv)
- Leveraged LLM APIs such as OpenAI, Claude, Gemini, in-house vLLM deployment, and fine-tuning APIs. Built automated pipelines on FastAPI, Flask, Redis, MongoDB, MCP, and deployed Docker containers to Google Cloud, AWS, Azure.

Santa Barbara City College
Adjunct Lecturer (Aug. 2023 - Dec. 2023)

- Taught in-person full semester course on Python, machine learning, and deep learning. Labs included a "small language model" neural network trained with PyTorch on tiny-shakespeare dataset.
- Incorporated MoeBot, my previously built agentic AI, as an AI teaching assistant.
- Quote from department chair: "The student evaluation ratings are the best I've ever seen out of the 12 years of evaluations packets I've signed off on."

Moebot.ai
Technical Founder / Lecturer (2021-2023)

- Built MoeBot, a subscription-based Discord AI agent powered by a swappable LLM backend. Incorporates RAG, Redis-backed agent memory, tool calling, Stripe payments. Deployed to Google Cloud.
- Built various software projects such as MIDI recording tools and VST audio plugins in Rust, Python, C.

Amazon Web Services
Deep Learning Software Engineer II (Mar. 2020 - Dec. 2020)

- Contributed to Amazon SageMaker's internal PyTorch and XGBoost repositories in Python and C++. Resolved customer issues and helped integrate Apache TVM deep learning compiler.

Palo Alto Networks
Senior Software Engineer (Oct. 2019 - Mar. 2020)
Software Engineer (Sep. 2018 - Sep. 2019)

- Awards: Project of the Quarter - Machine Learning Antivirus

- Proposed and implemented new stack-based pattern matching algorithm in C which improved threat coverage in PAN-OS firewall, resulting in higher scores on 3rd-party benchmarks.
- Solved many long-standing customer tickets and feature requests from data science, product managers, and threat research. Quote from VP of Engineering: "One-man army."
- Made major contributions to industry-first machine learning features - integrated inline machine learning models into resource-constrained firewall in C.
- Prepared and gave presentation explaining the pattern matching system in the threat detection codebase. The presentation recording is now used to train new hires and cross-functional teams working with threat detection code.
- Brought up and helped train two junior engineers.

Projects / Publications

- stacked-autoencoder-pytorch (100+ stars) - a popular PyTorch autoencoder influenced by Hinton's 2006 "deep belief nets" paper.
- Checkered CNN (30+ stars) - a deep learning technique I proposed, checkered subsampling.
- Passenger Screening Model (20+ stars) - my top-10 solution to a $1.5 million Kaggle challenge.
- GauchoMap Chrome Extension - 200+ users when I was maintaining it (2016).

Education

- 5-year accelerated B.S. + M.S. program @ University of California, Santa Barbara
- Master of Computer Science (2017 - 2018)
- Bachelor of Computer Science (2013 - 2017)

Miscellaneous

- 2nd-degree black belt in Taekwondo. Interested in mixed martial arts.
- Playing and writing piano music since early childhood.
- Expert DDR player and ranked #1 in online arena shooter.
- Languages: English (native), Farsi (native, but very rusty)