Shayan Sadigh

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

Summary

- Founding Engineer, Agentic AI @Aurascape.ai | Previously @Amazon SageMaker
- Placed top-10 in $1.5 million AI competition sponsored by Department of Homeland Security. Designed and trained 200 million parameter hybrid 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 - Current)

- Presented demos and contributed to patent drafts which helped raise $12.8 million funding. Three patents pending, with lead authorship on one.
- Developed agentic web traffic analyzer for firewall signature generation, 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, and deployed Docker containers to Google Cloud, AWS, Azure. Integrated with Model Context Protocol (MCP).

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

- Taught in-person 16-week 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
Founder (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 other 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, practicing Muay Thai.
- 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)