

SAURABH SHAH

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Education

University of Pennsylvania

Master of Science in Engineering in Computer Science 3.91 GPA

Philadelphia, PA

Jan 2021 - May 2023

- Focused on Algorithmic Theory, Artificial Intelligence, Machine Learning, and Natural Language Processing (NLP)

Bachelor of Science in Engineering in Networked and Social Systems Engineering 3.90 GPA

Aug 2019 - May 2023

- Major combines Computer Science, Systems Engineering, and Economics. Minors in Data Science and Mathematics

Experience

humans&

Member of Technical Staff

San Francisco, CA

Jan 2026 - Present

- Training systems that work with people, not replace them

Allen Institute for AI (Ai2)

Research Engineer ([paper](#))

Seattle, WA

Feb 2025 - Jan 2026

- Olmo team. Trained Olmo 3 to write code, use tools, and reason. Built RL + code execution infra. Code data curation.

Apple

Machine Learning Engineer

Seattle, WA

Oct 2023 - Feb 2025

- Siri Natural Language Understanding (NLU). Helped build an agentic Siri planner powered by Apple Intelligence

Allen Institute for AI (Ai2)

Research Engineering Intern ([paper](#))

Seattle, WA

Aug 2023 - Oct 2023

- Tried pretraining Olmo with ReLoRA, a parameter-efficient *pretraining* method. Learned lots about PyTorch/FSDP

University of Pennsylvania

Researcher ([paper](#)) ([talk](#))

Philadelphia, PA

Aug 2022 - May 2023

- Explored using free-text explanations for improving the robustness of LLMs to spurious cues in training data

Apple

Machine Learning Engineering Intern

Seattle, WA

May 2022 - Aug 2022

- Siri NLU. Built an internal Swift iOS app for testing text-to-intent parsing and counterfactual evaluation

Amazon

Software Development Engineering (SDE) Intern

Nashville, TN

May 2021 - Aug 2021

- Robotics-AI Computer Vision. Built a web app with React and AWS to configure, search, and view over 300,000 cameras

Personal Projects

The Learning Curve ([link](#))

March 2025 - Present

- A blog where I talk about machine learning research and engineering

Griffin LM + CUDA ([link](#))

May 2024 - August 2024

- I learned some cuda ([link](#)) and tried to implement Griffin from scratch in PyTorch with a cuda extension for the scan

Concept Space Embeddings ([link](#))

Feb 2023 - Apr 2023

- Worked with a team of 2 to create a novel method for interpretable embeddings of arbitrary text using LLMs and Decision Trees. Works for classification, regression, clustering, and post hoc explanation of black box models

Compass (Penn Course Recommendation) ([link](#))

Jan 2023 - Apr 2023

- Group of 4. Course recommendation web app. I built the recommendation system with (1) collaborative filtering and (2) text embeddings to recommend courses to students based on (1) perceived difficulty and (2) natural language interests

Poké-GANs (Pokémon Generator) ([link](#))

Mar 2022 - Apr 2022

- Generated complete Pokémons from names. Fine-tuned GPT-3 for types, stats, abilities; CLIP+VQGAN for images from generated text. Trained custom LSTM and GANs from scratch and compared results. Worked with partner.

Comedy Bot ([link](#))

July 2020

- Experimented with ML models to recognize and rate jokes I write and perform for crowds of 150+. Joke datasets from Kaggle. Experimented with Bag of Words/Naïve Bayes and LSTM models. Built with PyTorch

Technical Skills

Languages: Python, TypeScript/JavaScript, Go, CUDA/C++, Java, Haskell, Coq, Swift

Technologies/Frameworks: PyTorch/FSDP, LLMs, HuggingFace, AWS, React, Pandas