Aniket Mahajan

408-207-2982 | aniketm@stanford.edu | linkedin | github | San Jose, CA

EDUCATION

Stanford University

Stanford, CA

BS, MS, Computer Science, GPA: 3.7

Expected Jun 2026

Languages: Python, C, CUDA, C++, Java, React.js, R

Platforms: Azure, AWS, GCP, PyTorch, TensorFlow, Git, NumPy, Pandas, PostgreSQL, HuggingFace

Courses: Algorithms (CS 161), Machine Learning (CS 229), Statistical Arbitrage (MSE 244), Natural Language Processing

(CS 224N), Computer Vision (CS 231N), Parallel Computing (CS 149), Security (CS 155), Networks (CS 144)

WORK EXPERIENCE

Software Engineering Intern

San Francisco, CA

Corridor Security May 2

May 2025 - Present

- First intern at seed-stage startup focused on AI native secure by design software development
- Integrating MCP server into Cursor and designing a pipeline to benchmark LLM-generated security patches
- Supporting early product strategy and contributing to customer acquisition efforts

ML Systems Researcher

Stanford, CA

HAZY - Stanford AI Lab

Nov 2024 - Present

- Machine learning optimization advised by PhD Simran Arora in Chris Ré's HAZY Research
- Writing fast kernels using ThunderKittens primitives to optimize attention variants like multi-head latent attention
- Improved runtime of DeltaNet kernel 10x compared to Flash Linear Attention's benchmark

Machine Learning Intern

Portland, OR

Amazon Web Services (AWS)

Jun 2024 - Sept 2024

- Researched effect of parameter selection for **Hierarchical Navigable Small Words (HNSW)** algorithms on recall of vector embeddings in **vector databases** like PostgreSQL and MySQL
- Designed and built generalizable tool to automate testing of key parameters, dataset size, and database setups—further reduced runtime through batching benchmarks in parallel
- Contributed developments to open source vector similarity search for Postgres: pgvector

Software Engineering Intern

Glen Allen, VA

 $e\,Telic\,\,Inc.$

Jun 2023 - Aug 2023

- Prototyped and launched fulls stack web application utilizing AI **image recognition** and database backend to create sports highlights, reducing user inputted game footage time by **95**%
- Articulated objectives in cross-functional environment of 10+ members in U.S. and India for devops tasks
- Defined company workflow for incorporating machine learning with Yolov3 Darknet, Keras, and AzureVM

Projects

ScreenShield: Computer Monitor Tracking and Blurring for Video

Mar 2025

- Built a pipeline combining YOLOv11 and Grounded DINO + SAM to detect and blur monitors in video for real-time screen privacy
- Achieved 15x latency improvement over zero-shot baselines and >90% recall at 30 FPS. [Demo Video]

Fast Speculative Decoding for Efficient Token Drafting

Dec 2024

- Developed improvement to **speculative decoding** by representing it as a Markov Decision Process (MDP) to adaptively optimize token candidate length (K) during text generation in LLMs.
- Achieved 240.7% speedup in throughput on HumanEval against vanilla speculative decoding and baselines.

Poker Prophet: Behavior Cloning Poker Exploiter

Feb 2024

- Implemented supervised and reinforcement learning algorithms to generate behavior cloning estimations
- Fine-tuned model through self play with deep Q-learning and K-means clustering neural network algorithms
- Averages 1.16x profit on initial stack with final ensemble sampling implementation

LEADERSHIP EXPERIENCE

Stanford Entrepreneurship Clubs

Director of Business Association of Entrepreneurial Students (BASES)

May 2023 - Present

• Coordinated speaker series spanning 12 CEOs (Atlantic Records, TranscribeGlass), VCs (XFund, PearVC), & influencers and bonding & field trip events for 200+ students

VC3 Director of Affiliated Stanford Entrepreneurial Students (ASES)

Oct 2022 - Apr 2023

• Organized pitch competition with 16 Stanford startups & 16 VCs, including PearVC, Softbank, & Y Combinator