# Ameen Salim

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# **EDUCATION**

# Georgia Institute of Technology

Expected Graduation: June 2027

 $M.S.\ in\ Computer\ Science$ 

Davis, CA

Atlanta, GA (Remote)

University of California, Davis

June~2025

B.S. in Computer Science

• Relevant Coursework: Data Structures and Algorithms, Operating Systems, Advanced Algorithms, Systems Programming, Linear Algebra, Computer Architecture, Machine Learning, Scientific Computation, Deep Learning

• Participated in Amazon Campus Prep Series 2025

#### TECHNICAL SKILLS

Languages: Python(3yrs), JavaScript(2yrs), C/C++(1yrs), SQL

Software: AWS, GCP, Docker, React.js, Node.js, Flask, FastAPI, MongoDB, Express.js, Next.js, NLP, pandas, NumPy, ffmpeg, PyTorch, sci-kitlearn, OpenCV, GitHub CI, LLMs, Retrieval-Augmented Generation, Agentic AI, Git

#### EXPERIENCE

Software Engineer June 2024 – Present

MyGenie Bay Area, CA

• Building automated AI training pipeline for RadNerf model avatars, replacing manual processes and reducing time-to-deployment.

- Engineered video processing API to train videos via GPU-accelerated Google Cloud Run.
- Built APIs deployed on GCP using GCS and Cloud Run, enabling seamless video-to-avatar training with a 25% increase in throughput and a 40% reduction in processing time.
- Optimized facial extraction algorithms by tweaking parameters and adding pixel offsets for better orientation detection, improving accuracy by 15% and significantly reducing retries in the training process.

# Software Engineer Associate

September 2024 – June 2025

Artificial Intelligence Student Collective

Davis, CA

- Architecting and developing WebSocket API backend for real-time ASL translation, achieving sub-100ms latency for end-to-end processing in 5-person engineering team.
- Implementing efficient computer vision pipeline using MediaPipe for hand landmark detection, processing 30+ frames per second with 95% landmark detection accuracy.
- Optimized video frame encoding/decoding pipeline reducing payload size while preserving image quality for ML model inference.

#### AI Software Engineer Intern

June 2024 – September 2024

PrimisAI

Los Gatos, CA

- Debugged and tested a multi-AI agent system for RTL code review and correction, ensuring database retrieval consistency and hardware-specific topic accuracy. Validated retrieval system behavior for FPGA-specific IP catalogs used in 10k+ interactions, improving pass@1 accuracy from 60% to 77% in Verilog generation benchmarks.
- Benchmarked metrics for RAG Pipeline System, increasing system efficiency by 20%, reducing processing time, and enhancing retrieval accuracy.
- Spearheaded CI/CD pipeline implementation using GitHub Actions, accelerating API release cycles and minimizing downtime during updates.

# **PROJECTS**

# Analyzing Policing Efficiencies in San Francisco | Python, TensorFlow, sci-kitLearn

- Operationalized a machine learning model to optimize police resource allocation by predicting incidents and
  processing a dataset of 900k+ dispatch records from the San Francisco Police Department, with the goal of
  reducing response times and enhancing public safety.
- Utilized Python with pandas, scikit-learn, and TensorFlow to implement Random Forest and K-means clustering, achieving an MSE of 59.41 and R-squared of 0.996 for monthly incident predictions.

#### Loan Approval Predictor | Python, Pandas, sci-kitLearn

- Used a 100k+ financial dataset to evaluate loan approval chances based on features such as number of assets, CIBIL score, and credit score.
- Engineered and validated two predictive machine learning models, achieving accuracies of 91.9% and 89.4% through hyperparameter tuning and cross-validation.