Armaan Vakharia

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Summary

Software Engineer experienced in building scalable distributed systems and production-ready machine learning tools. Excited to tackle complex engineering challenges and deliver high-impact software, infrastructure, and AI solutions.

Experience

Software Engineer I — Austin, TX
Vectra AI — June 2025 - Present

- Improve and maintain JetStream, Vectra AI's internal real-time data processing and execution framework built in Python and deployed on Kubernetes, supporting fault-tolerant, scalable processing of millions of data points across six global regions with cross-region replication and synchronization.
- Developed a new Snapshot ETL pipeline within JetStream to consolidate legacy data collection and processing systems, incorporating Delta tables on S3 and SCD Type 2 logic to improve compute efficiency and streamline data access for detection algorithms running every 15 minutes.
- Ensure system reliability as part of the on-call rotation, proactively identifying and mitigating a large-scale data backlog that threatened SLOs. Prevented downtime and preserved detection accuracy for customer-facing systems by triaging and resolving issues using OpenSearch, Grafana/Prometheus, and PagerDuty.

Software Engineering Intern — Remote
Alation — Feb 2024 - Dec 2024

- Developed an internal analytics tool, modeling compensation data for 500+ employees against market benchmarks, cutting manual data processing time by 60%.
- Automated data analysis and integration using Pandas, significantly reducing HR workload.
- Integrated the tool with existing company software and developed an intuitive front-end for seamless adoption.

iOS Technical Support Advisor — Remote
Apple — Jun 2022 - Jun 2023

- Resolved over 350 technical issues per quarter, while maintaining a 97% customer satisfaction rating.
- Documented customer interactions with detail and accuracy, providing meaningful insights for product engineering teams.

Projects

Clang Taint Analysis — Austin, TX
UT Austin & Ericcson — Aug 2024 - May 2025
Conducted an in-depth performance analysis of Clang's taint analysis feature to enhance security scanning of widely used open-source libraries such as Redis, OpenSSL, and Postgres.

Are You Social Distancing? — Remote
MIT Beaverworks Summer Institute: Cog*Works — Jun 2020 - August 2020
Developed a computer vision model to detect face masks in images and video, achieving 93% accuracy on test data using deep learning techniques.

Education

B.S., Electrical and Computer Engineering — Austin, TX
University of Texas at Austin

Technical Skills

Languages: Python, C, C++, Java, JavaScript
Frameworks & Tools: React, Flask, Docker, Kubernetes, Terraform, Git
Data & Cloud: AWS, GCP, Delta Lake, Prometheus, Grafana