## **Aahil Shaikh**

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### **EDUCATION**

San José State University, B.S. Computer Engineering

DeAnza and Foothill College, GPA: 3.95 (3x Dean's List)

Relevant Coursework: Advanced C++, Data Structures

Rutgers University, Electrical and Computer Engineering, GPA: 3.906 (2x Dean's List)

Top 7% selected by the dean to join the Rutgers School of Engineering Honors Academy

Aug 2025 - May 2025

Sep 2024 - May 2025

Sep 2023 - May 2024

#### **EXPERIENCE**

### Palo Alto Networks, Santa Clara, CA

Part-time, R&D Software Engineering Intern, WildFire product

Aug 2025 - Present

Expanding upon prior internship by supporting more model types, culminating in a patent filing for core methodology

# Palo Alto Networks, Santa Clara, CA

R&D Software Engineering Intern, WildFire product

May 2025 - Aug 2025

- Engineered a production firewall feature for inline, real-time blocking of malicious AI models, achieving 100% detection coverage of malicious samples with zero false positives
- Architected data curation pipeline where the core LLM classifier (hosted on Vertex AI) achieved 100% precision and recall, enabling the creation of a high quality ground truth dataset managed with GCP Cloud SQL and Cloud Storage
- Developed and optimized the core detection algorithm for high-throughput, low-latency performance in resource constrained firewall environments, utilizing a **GCP VM** as a secure sandbox for all development and testing

# Palo Alto Networks, Santa Clara, CA

R&D Software Engineering Intern, WildFire Product

May 2024 - Sep 2024

- Developed an advanced threat intelligence system, initially detecting 6 specific malware families, which has since become a **backbone tool for the team**
- Engineered a Python tool that processed millions of logs (hundreds per family) for malware fingerprinting via ML clustering (TF-IDF, DBSCAN) and association rule mining, cutting production rule creation time from days to minutes, and establishing a robust CI/CD pipeline with automated testing

## VEX Robotics Competition (VEX IQ), Montgomery, NJ

Nov 2023 - May 2024

Founder and Head Mentor

- Founded and mentored two rookie robotics teams within the Vex Robotics Competition, guiding them to win 13 awards, winning the State Championships, and qualifying for the World Championship
- Taught engineering design and hardware/software principles, fostering teamwork and enthusiasm

### **TECHNICAL SKILLS**

Languages: Python, Java, C++, JavaScript, HTML/CSS, MATLAB

Libraries: NumPy, Pandas, SciKit Learn, ThreeJS, Flask, TensorFlow, LangChain, React Native, Google GenAl SDK

Technologies: Git, Linux, Google Cloud Platform, Vertex AI, HuggingFace, Vector Databases, Docker

# **PROJECTS**

Manara (2025) – Flask, Python, React, custom LangChain-like framework, HuggingFace, Google GenAl SDK

Developed a RAG-based agentic search engine with a custom framework using NLP and vector embeddings to extract, cite, and synthesize verifiable insights from a fragmented corpus, mitigating hallucinations. Engineered a Python/Flask backend with a RESTful APland client-server protocol to serve the AI agent to a React client

### Wildfire Predictor (2nd place at MontyHacks 2022) - Flutter, APIs, Flask, Python, NumPy, Pandas

Developed a ML app using a linear regression model to forecast wildfires with 95% accuracy. The app utilized realtime API data on humidity, temperature, and vegetation density to successfully predict California wildfires in 2022

Ghost Trainer (1st place at WWPHacks 2023) - Flutter, OpenStreetMap, GPS, Catmull-Rom algorithm

A fitness app that motivates individuals to enhance their health by generating their own virtual opponent

## Verita Health (3rd place at MontyHacks 2021) - Flutter, Firebase

A centralized dashboard for all your health information, this app aggregates medical reports from any source and format, offering a comprehensive view of your health