

Here's your optimized resume tailored for the "Generative AI and Machine Learning Engineer" role, along with actionable suggestions to further strengthen your profile.

Venkat Rao

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Summary

Highly analytical and results-driven **Generative AI and Machine Learning Engineer** with a proven track record in **end-to-end model development, deployment, and monitoring** within **production environments**. Adept at leveraging advanced machine learning techniques, **optimizing data pipelines**, and applying **software engineering best practices** to deliver innovative solutions and drive significant business value. Passionate about exploring new technologies and fostering AI adoption across the enterprise.

Technical Skills

- **Programming:** Python (Pandas, NumPy, Scikit-learn), SQL, Julia
- **ML & Deep Learning:** Regression, Classification, Unsupervised Learning, Model Monitoring, **Generative AI Concepts**
- **MLOps & Cloud:** AWS (SageMaker), Snowflake, GitHub, **Data Pipelines, Production Deployment**
- **Tools & Platforms:** Tableau, Docker (conceptual understanding)

Work Experience

Data Scientist

Toyota Financial Services | Plano, Texas (June 2022 - July 2023) - Redeveloped and **deployed** a loan originations model, achieving a **50% model performance improvement** and generating **\$2.5 million in realized value**. - Identified and rectified a critical issue in a **production credit risk model**, impacting **over 70% of accounts**, by implementing robust **monitoring scripts** to prevent future failures.

Data Science Consultant

Shawhin Talebi Ventures LLC | Plano, Texas (December 2020 - Present) - Implemented a comprehensive **data pipeline** for a novel study, analyzing over 300 biometric variables to uncover links between EEG activity and human performance. - Applied **unsupervised learning techniques** to longitudinal ICU data, successfully identifying distinct sepsis sub-phenotypes, translating complex data into actionable insights.

Research Assistant

The University of Texas at Dallas (Department of Physics) | Richardson, Texas
(December 2018 - May 2022) - Led **deployment** of a real-time **Python-based biometrics application**, providing immediate, previously inaccessible insights into human performance. - Developed and published an **open-source methodology** for optimal EEG band discovery, improving power spectrum characterization by a **factor of 2**, fostering reproducible research.

Education

California State University, Fullerton - Master of Science - 2016 **JNTUH College of Engineering, Hyderabad** - Bachelor of Technology - 2014
