Matthew Frank
(310)413-2539 | mattafrank2439@gmail.com | LinkedIn | Website | Medium

Education

University of California, Berkeley 2024
M.S. Information and Data Science (MIDS)
University Of California, Santa Cruz 2018
B.S. in Computer Science

Experience

Live Data Technologies Santa Barbara, CA
Machine Learning Engineer July 2024 - Present

- Data Normalization and Enhancement: Standardized 80 million records using APIs, implementing automated validation, vectorized transformations, and fuzzy matching to reconcile location, education, and industry data, improving accuracy and scalability for ML models.
- Job Tenure Prediction: Developed a time series neural network combining Transformers, LSTMs, and attention mechanisms, leveraging feature engineering and ensemble learning to boost prediction accuracy by 10%.
- Chat LDT Development: Built Chat LDT, a transformer-based query system with Chain of Thought reasoning and few-shot learning, achieving 95% accuracy in translating complex user queries into actionable schema terms.
- Workforce AI ChatBot: Built a LangGraph-based chatbot integrating internal APIs, internet search, and Python tools, enabling natural language workforce analytics with structured, reliable outputs.

Uniquify, Inc San Jose, CA
Machine Learning Research Manager September 2021 - October 2023

- Designed and led the implementation of CI/CD pipelines for the Seraphim project, enabling seamless model deployment and reducing integration times by 30%.
- Managed a team of software engineers to refactor and modernize legacy code into Python, enhancing maintainability and execution efficiency.

Uniquify, Inc San Jose, CA
Machine Learning Research Engineer October 2018 -September 2021

- DAT: Neural Network-Based Data Compression - Developed a neural network architecture for data compression, achieving a Peak Signal-to-Noise Ratio (PSNR) of 38 dB, surpassing traditional methods like JPEG and JPEG2000.
- Bethel: Object Detection with YOLO - Led the data labeling and training of a YOLO-based object detection model, implementing best practices in annotation to enhance model accuracy and performance
- Bethel: Celebrity Facial Recognition System - Constructed a comprehensive database of over 10K+ celebrity images and fine-tuned a computer vision model to achieve 98% accuracy in facial recognition tasks.

Skills & Interests

Machine Learning, Deep Learning, Large Language Models (LLMs), Retrieval-Augmented Generation (RAG), LangGraph, Prompt Engineering, Data Processing, Optimization, Reinforcement Learning, Algorithmic Trading, Real-Time Inference, Streaming APIs, LLMOps, CI/CD Pipelines, Cloud Computing (AWS), Git, Data Visualization