Shah Dawran

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AI Engineer with over 6 years of experience in designing, developing, and deploying cutting-edge AI/ML solutions at enterprise scale, including for several Fortune 500 companies. Demonstrated success in production-grade NLP, computer vision, and predictive analytics primarily using Azure AI, TensorFlow, and PyTorch, along with various other state-of-the-art (and legacy) libraries and frameworks.
Extensive experience in building scalable ML pipelines, deploying models on cloud platforms (especially Azure, but also IBM Cloud and others), and integrating responsible AI principles throughout.

WORK EXPERIENCE

Anthropic **01/2023 - Present**
AI Engineer **San Francisco, CA**

- Designed and deployed large-scale transformer models (GPT, BERT, T5) for document understanding, summarization, and question answering.
- Led architecture of end-to-end ML pipelines using Azure ML SDK, MLflow, and Kubernetes for training and inference at scale.
- Developed low-latency computer vision solutions with Azure Custom Vision for quality inspection and visual search.
- Built CI/CD pipelines for model deployment using Azure DevOps and GitHub Actions, reducing deployment time by 70%.
- Integrated Responsible AI Dashboards to ensure fairness, transparency, and traceability in sensitive AI deployments.
- Designed AutoML systems for experimentation and hyperparameter tuning, accelerating model iteration cycles.
- Provided technical leadership in multi-region AI projects, aligning architecture with enterprise security and compliance.
- Delivered hands-on guidance to enterprise clients in deploying AI workloads on Azure cloud, optimizing performance and cost.
- Conducted performance optimization through model quantization and pruning for edge and mobile inference.
- Published technical blogs and internal whitepapers to drive AI adoption across partner ecosystems.
- Mentored mid- and junior-level AI engineers, conducted design reviews, and defined team-wide best practices.
- Engineered NLP systems for Watson Assistant and Discovery, supporting multi-turn conversations and contextual search.
- Developed multilingual intent recognition models across 7 languages using fastText, CRFs, and transformer models.
- Created reusable ML modules integrated with REST APIs and deployed in high-throughput cloud environments.
- Implemented AutoML pipelines enabling domain-specific training and fine-tuning for enterprise clients.
- Built feedback loops for continuous learning using live user interactions and dynamic retraining schedules.
- Conducted feature selection and model interpretability using SHAP and LIME to align with client trust requirements.
- Designed internal analytics tools for dataset versioning, label quality audits, and performance benchmarking.

H2O.ai **02/2018 - 12/2022**
Data Scientist & Data Analyst **Mountain View, CA**

- Designed and deployed machine learning models to enhance forecasting, fraud detection, and intelligent automation within SAP,s ERP ecosystem.

- Engineered large scale ETL pipelines using Apache Spark and SAP HANA for ingesting and processing multi terabyte enterprise datasets.
- Built NLP models using spaCy and custom embeddings to analyze unstructured customer feedback, improving sentiment analysis precision by 40%.
- Developed deep learning solutions (CNNs, RNNs) for document classification, invoice extraction, and anomaly detection in financial workflows.
- Led time series forecasting initiatives using ARIMA, Prophet, and LSTM to optimize inventory planning and sales predictions.
- Collaborated with SAP S/4HANA teams to integrate AI-driven insights directly into core business modules.
- Applied unsupervised learning for customer segmentation, resulting in targeted marketing campaigns with a 25% increase in engagement.
- Conducted exploratory data analysis and feature engineering across structured and semi-structured data sources to improve model accuracy.
- Prototyped reinforcement learning agents to optimize business process flows and dynamic pricing models.
- Published internal whitepapers and contributed to patent filings on AI driven business applications.
- Ensured model interpretability and compliance with enterprise-grade explainable AI standards and ethical AI principles.
- Mentored junior data scientists, fostering a knowledge sharing culture and leading peer reviews for model design and evaluation.

EDUCATION

B.S in Computer Science
Hagerstown Community College 01/2014 - 01/2018

SKILLS

CORE SKILLS:
Artificial Intelligence, Machine Learning (Supervised & Unsupervised Learning), Model Evaluation, Fine-Tuning, Interpretability, Monitoring, Retraining, Deep Learning (CNN, RNN, LSTM, Reinforcement Learning, Time Series Forecasting using ARIMA, LSTM, Prophet), Natural Language Processing including Text Classification, Named Entity Recognition (NER), Sentiment Analysis, Question Answering, and Multilingual NLP, Responsible and Explainable AI (Bias Mitigation, Ethics Compliance, SHAP, LIME), AutoML and AI platforms (Azure OpenAI, IBM Watson Studio, Microsoft Azure AI/ML/Cognitive Services, Hugging Face, MLflow), ETL Pipeline Design, Data Wrangling, Feature Engineering, CI/CD with Azure DevOps and GitHub Actions, MLOps and Model Deployment using Azure ML, Docker, Kubernetes, and Monitoring, Workflow Orchestration with Apache Airflow, Big Data and Distributed Computing with Apache Spark and PySpark, programming in Python and R using libraries like NumPy, Pandas, Scikit-learn, Matplotlib, TensorFlow, PyTorch, spaCy, NLTK, transformer models such as BERT, GPT, and T5 via Hugging Face, RESTful API Integration, development tools including Jupyter, VS Code, Git, GitHub, BI tools such as Power BI, Tableau, Microsoft Excel, databases including SQL, NoSQL (MongoDB), SAP HANA, and analytics techniques such as Cohort Analysis, Hypothesis Validation, and Statistical Testing.