

OBJECTIVE

Experienced Data Scientist and MLOps Specialist with 4.11 years of expertise in delivering scalable AI solutions and deploying ML models on AWS and Azure. Skilled in developing and fine-tuning Generative AI models and AI agents using LangChain and advanced GenAI frameworks. Proven ability to lead cross-functional teams to build innovative AI/ML-driven systems across various domains. Strong background in end-to-end data science workflows, cloud deployments, and CI/CD pipelines. Adept at driving business value through high-impact machine learning use cases and clear communication of data insights to stakeholders.

TECHNICAL SKILLS

- Generative AI: LLMs, Diffusion models, Multimodal models, LLaMA, AI Agents
- Programming & Tools: Python, SQL, JSON, Git, GitHub, Power BI, Tableau
- Machine Learning & Deep Learning: TensorFlow, PyTorch, scikit-learn
- Cloud Platforms: AWS (SageMaker, Bedrock, EC2, S3, Lambda, Glue, CloudFormation), Azure (AI Studio, Data Factory, Databricks, Cognitive service, Pyspark, Blobstorage)
- MLOps: Model monitoring, Automated Deployment, Model versioning, MLflow, GitOps, Airflow
- Frameworks: FastAPI, Flask, Django
- CI/CD Automation: Jenkins, Terraform, Docker, Kubernetes, ArgoCD

EXPERIENCE

Data Scientist- HCL Technologies(Vijayawada)

June 2021- Present

- Designed and implemented multimodal Generative AI solutions by combining vision and text models to elevate customer experience.
- Built comprehensive machine learning pipelines leveraging AWS SageMaker and Azure Databricks for streamlined model development and deployment.
- Created a conversational chatbot using Retrieval-Augmented Generation (RAG), utilizing OpenAI embeddings and managing vector stores with ChromaDB, Pinecone, FAISS, and PEFT techniques like LoRA and QLoRA.
- Spearheaded the deployment of a text-to-image diffusion model for marketing campaigns, cutting down campaign creation time by 30%.
- Deployed custom Llama-based language models to automate text summarization and customer support workflows.
- Integrated LangChain to facilitate advanced chaining of language models, improving multi-turn interaction and contextual understanding across AI applications.
- Architected serverless AI solutions with AWS Lambda and API Gateway to ensure scalable and cost-effective deployments.
- Improved customer support efficiency by reducing response time by 40% through AI-powered automated summaries.
- Managed MLflow experiments to track model training, tuning, and deployment metrics, ensuring reproducibility and model version control.
- Automated model lifecycle management using MLflow, enhancing continuous integration and delivery of machine learning models in production.

- Deployed and monitored large-scale machine learning systems on Azure infrastructure, ensuring high availability and scalability.
- Implemented continuous integration/continuous deployment (CI/CD) pipelines for machine learning workflows using Jenkins and GitLab.
- Leveraged Terraform for infrastructure automation, managing Azure resources such as Azure Virtual Machines, Blob Storage, and Azure Functions.
- Built and automated CI/CD pipelines for machine learning models using Azure DevOps Pipelines and Azure Machine Learning.
- Integrated Docker for containerized model deployments to enable consistent environment replication across development, staging, and production.
- Automated model versioning and rollback processes using Azure Machine Learning services and Azure Functions.
- Conducted continuous model monitoring and logging with Azure Monitor and Application Insights to ensure sustained model performance.
- Implemented data preprocessing, feature engineering, and model selection using Python (Pandas, Scikit-learn).
- Applied various Artificial Intelligence (AI)/machine learning algorithms and statistical modeling techniques including decision trees, text analytics, natural language processing (NLP), supervised and unsupervised learning, and regression models.
- Built predictive models to forecast sales trends, achieving a 95% accuracy rate.

Project 1: Generative AI for Text Summarization

- Implemented NLP models using Hugging Face Transformers and Azure AI Studio.
- Deployed models using AWS Lambda and Azure Data Factory (ADF) workflows.

Project 2: MLOps Workflow Automation with AWS

- Built CI/CD pipelines for ML models using Jenkins and Docker.
- Deployed Utilized AWS SageMaker and Azure Databricks for model training and deployment.

Project 3: Machine Learning for Customer Churn Prediction

- Engineered features from customer interaction data.
- Trained and fine-tuned classification models using Scikit-learn and XGBoost.

EDUCATION

Jawaharlal Nehru Technological University (JNTU), Kakinada , India
Bachelor of Technology (B.Tech) – Electronics and Communication Engineering

Sept 2014- Apr 2018

CERTIFICATIONS

- Microsoft Azure AI Fundamentals – AI900
- Oracle cloud Infrastructure 2024 AI Foundations Associate
- Microsoft Azure Data Engineer Associate – DP 203