

charishma polineni

AI/ML Engineer | Machine learning Engineer

AI/ML Engineer with 3+ years of experience building and deploying production-grade machine learning and LLM-based solutions in cloud environments.

✉ charishmapolineni2001@gmail.com

📞 8034179674

📍 2212, Herndon, VA, Farougi Ct, United States

EDUCATION

Master of Science in Computer Science Texas Tech University

08/2023 - 05/2025

Lubbock, TX, USA

Bachelor of Technology in Computer Science Jawaharlal Nehru Technological University, Kakinada (JNTUK)

06/2018 - 07/2022

India

WORK EXPERIENCE

Machine Learning Intern HD Supply

06/2021 - 07/2022

Hyderabad, India

Achievements/Tasks

- **Developed and deployed ML models** for customer segmentation and churn prediction using **Scikit-learn, TensorFlow, and Python**, improving retention analysis and marketing targeting accuracy by **20%**.
- **Built a product recommendation engine prototype** leveraging collaborative filtering and NLP-based text similarity, enhancing personalization across retail categories.
- Worked on **vector-based search experiments** using embedding models to explore semantic matching — experience foundational to **RAG (Retrieval-Augmented Generation)** and GenAI applications.

AI/ML Engineer American Airline

07/2022 - 07/2023

Hyderabad, India

Achievements/Tasks

- Designed and deployed predictive ML systems for flight delay and passenger demand forecasting, improving operational accuracy by 18% and supporting data-driven decision pipelines across enterprise systems.
- Developed and optimized NLP-based classification models to automatically categorize and route customer service tickets, reducing average response time by 30%.
- Implemented ETL workflows and metadata management for large-scale structured and unstructured datasets (millions of rows) using Python, SQL, and PySpark.

SKILLS

Python

R

SQL

Bash

AI/ML Frameworks

Generative AI Tools

Data Science & Analytics

MLOps & Deployment

Cloud Platforms

Databases

Workflow Orchestration

APIs & Frameworks

Web Development & Integration

PERSONAL PROJECTS

Sumarishma – Dynamic Multi-Domain Web Platform (04/2025 - 06/2025)

- Designed and developed a **real-time dynamic web application** integrating multiple domains — Business, IT Skills, Jobs, Fashion, Cooking, Entertainment, and Music — with **live API-based content** and **Firebase authentication**

AIR BNB NY Data Classification (03/2025 - 05/2025)

- Designed ML models to classify and cluster Airbnb listings for a holiday planner firm based on price, location, minimum nights, and availability.
- Implemented Decision Tree, Naive Bayes, Lasso, and Ridge Regression on a large dataset (~100K listings) with 75% accuracy.

CERTIFICATES

Machine learning with python

Generative AI with Large Language Models – Coursera

Microsoft Certified: Azure AI Engineer Associate

Microsoft SQL Certification Training

Programming in Python -meta

LANGUAGES

English

Full Professional Proficiency

Telugu

Full Professional Proficiency

INTERESTS

AI & Machine Learning

Software & Development

Innovation & Product Development

Website Development