

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, Farouqi 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

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

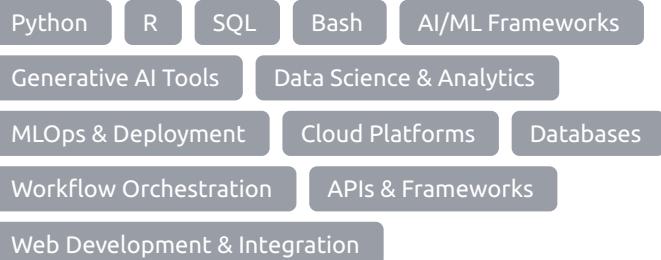
American Airline

07/2022 - 07/2023

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



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