AKHIL PINGALI

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EDUCATION

Master of Science in Data Science, University of New Haven, West haven, CT | Aug 2023 - May 2025 Current GPA: 3.8/4 Courses:

• Machine Learning, Data Engineering, Artificial intelligence, Natural Language Processing, Deep Learning Maters in Information Technology, Vignan university, India | Aug 2016- may 2019 CGPA: 8.72/10

EXPERIENCE

Data Engineer /ETL Developer, Tata consultancy services, India | Jan 2020 - Aug 2023

- Collected, cleaned, and analyzed large datasets to identify trends and patterns.
- Utilized statistical analytics and data visualization tools to interpret the data and present meaningful insights to stakeholders.
- Optimized resource utilization by creating a single pane view dashboard in Spotfire, with a python
 and Oracle SQL ETL pipeline that cleaned, pre-processed and collated data from productivity tools like
 JIRA, Cherwell and Sharepoint.
- Created reports, dashboards, and visualizations using tools like Tableau, Power BI, and Excel to effectively
 communicate analytical findings to stakeholders and demonstrated my knowledge and understanding to
 other team members.

GRADUATE-INTERN, BRAINLABS.AI, India | Dec 2018 - Aug 2019

- Developed dynamic .NET Core MVC web applications with RESTful APIs, integrating front-end frameworks and managing database schemas with Entity Framework Core.
- Implemented secure role-based authentication using ASP.NET Identity and optimized performance with caching and asynchronous processing.
- Streamlined deployment through CI/CD pipelines in Azure DevOps, achieving efficient and reliable
- application delivery.

PROJECT

Created a CHATBOT for UNH university website, UNH | Fall 2024

- Trains a pre-trained model (like GPT) on curated UNH-specific datasets.
- Implements a retrieval pipeline to fetch real-time data from a knowledge base or document repository.
- The performance of Fine-Tuning and RAG approaches will be evaluated and compared.

Remote Patient Care: Health Monitoring & Adherence (AWS & IoT) University of New Haven | Spring 2022

- Developed an IoT-based remote patient monitoring system using AWS.
- Enabled real-time health tracking via wearable devices and AWS IoT Analytics.
- Implemented **predictive analytics** for early risk detection and personalized care.
- Designed a secure data pipeline with AWS Glue, SageMaker, and CloudWatch.
- Improved medication adherence and patient engagement, reducing hospital visits.

Sentiment Analysis for Movie Review Data Using NLP, UNH | Spring 2022

- To develop a sentiment analysis model using natural language processing (NLP) techniques to classify movie reviews as positive or negative.
- The key steps involved in this project are data preprocessing, feature extraction, model development, model evaluation, and model deployment.
- The developed sentiment analysis model achieved an accuracy rate of over 80% in predicting the sentiment of reviews related to the movies.
- The deployed model can be used to classify the sentiment of new reviews related to other movies

TECHNICAL SKILLS

- Languages: Python (Expert) (PySpark, Dask, Numpy, Pandas, Scikit-Learn, PyTorch, Matplotlib, Django),
 Powershell, R (Beginner), C#, VB, ASP.NET MVC
- Databases and Big Data Tools: SQL Server, Oracle, MYSQL (Expert), PostgreSQL, Hadoop, Map Reduce,
 Spark, Dask
- Developer Tools: Git, Github, Bitbucket, Windows Subsystem for Linux, VSCode, PyCharm
- Infrastructure Tools: Kubernetes, Docker, Helm, Apache Superset, VMware, JIRA, VMWare, Rest API

Certifications

- Python, SQL
- Natural Language Processing, Deeplearning
- Data Science Foundations
- Artificial Intelligence Foundations: Machine Learning