ROHITH PANJALA
rohithpanjala2@gmail.com | +1 (571) 455-0855 | LinkedIn | GitHub

EDUCATION

George Mason University, Virginia.   **Dec 2022 - Dec 2024**

Master of Science in Data Analytics Engineering, Grade: 3.9 / 4.0

Osmania University, Hyderabad: **Jun 2016 - May 2020**

Bachelor of Technology in Electrical and Electronics Engineering, Grade: 3.1 / 4

SKILLS

Languages	Python, R (Programming), C, PySpark, Java
Web Development	HTML, CSS, JavaScript
Databases	MySQL, Oracle DB, MongoDB, MS SQL Server
Data Science	NumPy, Pandas, SciPy, Seaborn, Scikit-learn, BeautifulSoup
Machine Learning	Clustering, Regression, KNN, Decision Trees
Tools & Framework	Power BI, Tableau, Hadoop, Spark, Jupyter Notebook, Microsoft Excel, Word, Power Point, Visual Studio Code, R Studio, SAS, Azure Databricks, Analytical Solver
Cloud services	Amazon Kendra, Amazon Lex, Amazon DynamoDB, Amazon Bedrock

WORKEXPERIENCE (3 YEARS)

Data analyst Intern | Infosys Limited, India   **Jan 2021 – Jan 2022**

- Assisted in performing exploratory data analysis (EDA) on financial datasets using Excel and SQL to identify patterns and trends supporting business insights.
- Created basic dashboards and reports using Excel to provide visibility into key financial metrics and business performance.
- Collaborated with senior analysts to document data processes and workflows, enhancing the understanding of data lineage and reporting structures.

Data analyst | Infosys Limited, India   **Jan 2022 – Dec 2023**

- Designed and implemented scalable data pipelines using SQL and Python, automating ETL processes to improve data accuracy and reduce processing time by 30%.
- Developed predictive models to analyze insurance claims data, assess risk factors, and optimize pricing strategies.
- Conducted actuarial analysis and loss reserving projections, supporting financial planning and risk mitigation strategies.
- Collaborated with cross-functional teams to analyze key business drivers, ensure compliance with regulatory standards, and improve pricing methodologies.

PROJECTS

1. **Generative AI Retrieval-Augmented Generation (RAG) Chatbot for City Governments:**
- Developed a scalable and secure Generative AI chatbot prototype for city government services using AWS.
- Implemented Retrieval-Augmented Generation (RAG) architecture with Amazon Kendra and Amazon Bedrock to enhance response accuracy and mitigate AI hallucinations.
- Integrated AWS Lambda, Lex, and DynamoDB for seamless serverless processing and real-time citizen engagement.

Technology/Tools: AWS Kendra, Bedrock, Lambda, Lex, DynamoDB, Python, Machine Learning, Prompt Engineering.

2. **SkinGPT: AI-Powered Diagnostic System for Skin Condition Analysis**
- Developed SkinGPT, an AI-driven diagnostic tool for skin condition analysis using YOLOv5 for image classification and the LLaMA model for NLP.
- Designed a user-friendly chatbot interface to provide detailed and accessible health information, enhancing patient engagement.
- Supported dermatologists with reliable second opinions and improved dermatological care accessibility, especially in underserved areas.

Technology/Tools: Machine Learning, Natural Language Processing, YOLOv5, LLaMA Model, Telemedicine, Patient Engagement.

3. **Machine Learning project for predicting patient survival and identifying key features related to heart failure:**
- Developed machine learning models to predict patient survival in heart failure and identify key clinical features, leveraging logistic regression, KNN, decision trees, and random forests.
- Conducted social media sentiment analysis on 100,000+ tweets using NLP techniques, improving accuracy with tokenization, stop-word removal, and stemming/lemmatization.
- Built interactive data visualizations and model presentations using R for clinical predictions and Python (Matplotlib, Seaborn) for sentiment analysis insights.

Technology/Tools: NLTK, SVM, Naive Bayes, Random Forest, Matplotlib, Seaborn, Python.