Gana Syam Reddy Mandepudi

44 Northrup Pl, Buffalo, NY 14214 | +1 (716) 538-9352 | ganasyam@buffalo.edu | www.linkedin.com/in/syam-reddy

EDUCATION

University at Buffalo, The State University of New York – Buffalo/USA   Aug 2023 – Dec 2024
Master of Science in Engineering Science - Data Science
Cumulative GPA: 3.7/4

TECHNICAL SKILLS

- **Programming Languages**: C, Python, R, SQL, MATLAB, Bash, Shell, JSON, HTML, CSS, JS.
- **Cloud Technologies:** AWS, Azure.
- **Frameworks**: Scikit-learn, NumPy, Pandas, Matplotlib, Seaborn, CNN, NLP, Kafka.
- **Tools**: Jenkins, Docker, Nagios, Spark, Git, ServiceNow, Hadoop, Databricks, Power Bi, Tableau.

WORK EXPERIENCE

Tata Consultancy Services (TCS), India – DevOps Engineer   Jul 2021 - Jul 2023

- Managed production servers and created development and test environments replicating the production setup to ensure seamless operations.
- Provided 24/7 support and participated in daily standup meetings, tracking tasks using Jira as part of an Agile methodology.
- Automated routine tasks, including instance resizing, volume resizing, and production data backup, by creating Jenkins pipelines, significantly reducing manual intervention.
- Proposed and implemented a cost-saving solution by automating the adjustment of AWS storage classes based on specific requirements.
- Developed a Lambda function triggered by AWS EventBridge to automate IP whitelisting in AWS WAF, addressing access issues effectively.
- Innovated a Slack-based instance resizing solution to accommodate non-technical users, enabling them to perform tasks via simple Slack commands, thereby simplifying the process and improving efficiency.

Fragma Data Systems, India – Data Analyst   Aug 2020 - Jun 2021

- Trained in using Azure Data Factory (ADF), Databricks notebooks, and Power BI to enhance proficiency in data automation, processing, and reporting.
- Engineered ETL processes and data warehousing solutions, utilizing Azure Data Factory (ADF) pipelines and Databricks notebooks to automate data ingestion from various sources, including Azure Data Lake Storage (ADLS), SFTP, SharePoint, and Dataverse.
- Developed Power BI reports with Row-Level Security (RLS) to ensure data confidentiality, and access control.
- Authored Databricks notebooks for SQL query execution and automated result dispatch, improving data handling and reporting efficiency.
- Managed the onboarding of new datasets, performed comprehensive data testing, and conducted periodic enhancements to the data framework, ensuring continuous improvement.

PROJECTS

Bank Customer Churn Prediction – *Python, Data Cleaning, Sampling, Feature Engineering, Machine Learning*

- Built machine learning models (Logistic Regression, K-Nearest Neighbors, Naive Bayes, Random Forest, and SVM) to predict bank customer churn, achieving 83.14% accuracy. Applied data preprocessing techniques such as data cleaning, handling missing values, SMOTE, and Random Under-sampling for dataset balancing.
- Developed a user-friendly web application for real-time churn prediction, enabling stakeholders to input customer data and receive instant churn risk assessments.

Retail Data Management System – *SQL, Database Normalization, Relational Models, Indexing, Query Optimization*

- Developed a retail data management system with normalized tables and relational models to enhance data integrity, improving query performance by over 50% through SQL optimization and indexing.
- Created an interactive dashboard providing real-time access to sales, customer, and inventory data, supporting sales, marketing, inventory management, and customer support teams.

Handwritten Digit Classification – *Python, SVM, CNN, TensorFlow, Keras, Image Classification*

- Developed a machine learning model for handwritten digit classification using the MNIST dataset to accurately predict digits (0 to 9) in the test set.
- Achieved exceptional results with an SVM model, reaching 87.37% test accuracy after fine-tuning, and a CNN model with peak accuracy of 89.03%, demonstrating superior performance for image classification tasks.

CERTIFICATIONS

- AWS Certified Cloud Practitioner
- Microsoft Certified AI Fundamentals
- Microsoft Certified Azure Fundamentals
- Microsoft Certified Data Fundamentals
- IBM Data Science Professional
- Udemy Certified AWS SysOps Administrator