SWAJAN REDDY GADDAMPALLY

+1 832-807-5260 | swajan.edu@gmail.com | linkedin.com/in/swajanreddy

EDUCATION

University of Houston **August 2023 - December 2024**
Master's, Statistics and Data Science *GPA: 3.85*
- Machine Learning, Big Data Analytics, Deep Learning, Data Visualization, Statistical Analysis, Python Programming

Jawaharlal Nehru Technological University **August 2019 - July 2023**
Bachelor's, Computer Science *GPA: 8.2*
- Database Systems, Data Structures and Algorithms, OOPS concepts, Computer networks, Operating Systems, IOT

SKILLS

Data Science and Machine Learning: Python, Pandas, NumPy, Pytorch, Tensorflow, SpaCy, Python NLTK, LangChain, Natural Language Processing (NLP), Knowledge Graphs, Hugging face, Scikit, pyspark, Apache Spark, MySQL
Big Data Analytics: Azure Data factory, Databricks, Apache Kafka, Apache Airflow, Spark, Hadoop
Cloud ML Ops and Deployment: AWS EC2, AWS sagemaker, AWS Athena, Azure Datalake, Azure ML studio, GCP, Docker, Git, Kubernetes
Data Visualization & Business Analytics: Power BI, Tableau, Excel
Web & App Development: Flask, Django, HTML/CSS, Javascript, Tkinter, SQL, Salesforce Developer, UiPath - RPA developer, Selenium

PROFESSIONAL EXPERIENCE

University of Houston **Houston, TX, USA**
Machine Learning Research Assistant *September 2023 – Present*
- Collaborated with researchers to develop HRManagement simulators, improving effectiveness by 15%, and designed AI training infrastructure, integrating GPT models into web applications, boosting text data processing efficiency by 80%.
- Designed and managed data pipelines using Azure Data Factory and Azure Databricks, resulting in a 40% improvement in strategy alignment by creating databases of student grades and scores.
- Levaraged Apache Spark and performed Exploratory Data Analysis (EDA) and developed insightful Power BI dashboards, improving team strategies by 25% and effectively communicating performance benchmarks.
- Analyzed and optimized AI models using Python libraries (spaCy, NLTK), leading to an 18% improvement in student outcomes through systematic evaluation and application.

Defense Research and Development Organization Hyderabad **Hyderabad, TG, India**
Data Science Intern *January 2022 - March 2022*
- Enhanced project outcomes by 20% through Python, Machine Learning, and Data Analysis. Analyzed over 10,000 multisensor data points using linear regression, decision tree, and k-means clustering, improving data-driven decision-making by 25%.
- Performed comprehensive data analysis and visualization using Python and Excel, increasing clarity of insights and reporting by 30% for project stakeholders.
- Developed predictive models and machine learning algorithms using Python, reducing error rates in analysis processes by 15% and enhancing data reliability.

PROJECTS & OUTSIDE EXPERIENCE

- **Human Mimic Chatbot using Transformers**: Led a team to develop Deep Learning software for human-like conversation simulation, achieving an 80% increase in user satisfaction.
- **End-to-End ML Ops Project for Student Performance Prediction**: Developed a CI/CD pipeline using AWS and Azure, achieving 86% model accuracy and reducing model response time by 15%.
- **Database Management System for Indian Cricket Team**: Engineered a robust relational database using SQL in Oracle 7g, optimizing queries for seamless data retrieval and manipulation.
- **AI-powered Streamlit Web App for Word Document Processing and Summarization**: Integrated Gemini AI to streamline document processing, reducing processing time by 40% and improving efficiency in white paper summary generation.
- **Comprehensive Data Engineering and Analytics Pipeline with Azure for Business Intelligence:** Designed & developed scalable data pipelines and ETL processes using Azure. It extracts data from diverse sources, including web APIs, loads it into Azure Data Lake Storage via Azure Data Factory, and transforms it into a star schema database on Azure Databricks for analysis. Utilized Spark for data processing in azure synapse analytics. The pipeline culminates in interactive visualizations and dashboards using Power BI to derive actionable insights and support strategic decision-making.

RESEARCH PAPERS PUBLISHED

- Survey on Chatbot Classification and Technologies (www.irjet.net/archives/V9/i11/IRJET-V9I1118.pdf)
- Statistics and ML in Data science and effect in Businesses (https://doi.org/10.55248/gengpi.2022.3.11.38)
- Human Mimic Chatbot (WJARR) (https://doi.org/10.30574/wjarr.2023.18.3.1228)