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Education

Indiana University Bloomington

August 2023 - May 2025

Master of Science in Data Science — GPA: 3.8/4

Bloomington, USA

Relevant Coursework: Applied Algorithms (Python), Applied Machine Learning, Intro to Statistics (R), Data Mining, Cloud Computing (AWS), Big Data Applications.

University College of Engineering, Osmania University

August 2018 - June 2022

Bachelor of Engineering in Electronics and Communication Engineering — GPA: 9.01/10

Hyderabad, India

Relevant Coursework: Programming for Problem-Solving (Python), Scripting Languages (Linux, Python, Perl), Database Management, Calculus, Matlab, Linear Algebra, Computer Architecture.

Work Experience

IU Communications and Marketing

April 2024 - Present

Data Analyst

Bloomington, IN

- Developed 100+ automated data pipelines in Salesforce Marketing Cloud to facilitate seamless communication among leadership, faculty, staff, and over 1.5 million students.
- Increased click-through rates (CTR) by 46% through data mining and exploratory data analysis (EDA) using Python and Power BI, uncovering key insights into campaign efficiency and payment prompts.
- Refined email marketing strategy by analyzing metrics such as click-through rates, open rates, unsubscribe rates, and conversion rates using SQL, leading to a 24% increase in open rates through subject line optimization.

The Sparks Foundation

March 2023 - April 2023

Data Science and Business Intelligence Intern

Remote

- Employed SQL queries to extract and integrate data from multiple datasets from an Amazon S3 bucket, and conducted EDA to identify geographical hotspots and security challenges.
- Applied various machine learning algorithms on diverse datasets, optimized overall model performance through hyper-parameter tuning, and boosted predictive capabilities for proactive security measures.
- Utilized Python libraries and Tableau for data analysis, revealing Time Series patterns and trends, leading to a 15% reduction in security incidents and a 20% increase in operational efficiency.

Projects

WordSense: NLP Auto-suggestion System | **Tech Stack:** Python, NLP, textdistance, Matplotlib

- Developed WordSense, an NLP-powered system that improved text accuracy by 85%, using Python's textdistance and collections libraries to correct spelling errors and suggest fitting words, enhancing user experience.
- Implemented advanced text analysis to analyze word frequency with Counter and Matplotlib, processing over 1 million words, and visualizing text nuances to provide users with precise suggestions and insights.
- Enhanced autocorrect functionality with Jaccard similarity and Levenshtein distance algorithms, achieving a 90% accuracy rate in word corrections, ensuring clearer communication for users.

Text Summarizer Using LLMs | **Tech Stack:** Generative AI, LLM, NLP, Hugging Face, Streamlit

- Leveraged Hugging Face's LLMs, including GPT-3 and T5, achieving a 20% reduction in text summarization time and resources. Streamlined model loading and fine-tuning for enhanced NLP applications.
- Engineered a user-friendly Streamlit web app for text summarization, ensuring a 33% improvement in user experience. Implemented an intuitive summarization pipeline, allowing seamless text input and summarization outputs.
- Showcased Hugging Face's LLMs, reducing complexities by 14.5%, and contributed to a 28% increase in NLP advancements through impactful code examples for text summarization.

Skills

Languages: Python, PySpark, Scala, Java, SQL, R, Matlab

Python Libraries: SciKit-Learn, TensorFlow, OpenCV, Numpy, Pandas, Matplotlib, Beautiful Soup, NLTK, PyTorch

Tools and Platforms: AWS, Power BI, Tableau, Salesforce, Microsoft Office Suite, GIT, MySQL

Data Science Skills: Machine Learning, Deep Learning, NLP, Large Language Models, Generative AI, Data Visualization, Predictive Modeling, Data Pipelines (ETL), Statistical Modeling, Network Analysis, Database Management

Soft Skills: Effective Communication, Problem Solving, Analytical Thinking, Team Collaboration, Adaptability, Time Management