

AMISHA GANGWAR

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EDUCATION

Syracuse University, School of Information Studies, Syracuse, NY

Aug 2022 – May 2024

M.S. Applied Data Science: GPA – 4.00/4.00

Relevant Coursework: Database Administration Concepts and Database Management | Introduction to Data Science| Natural Language Processing | Applied Machine Learning | Quantitative Reasoning | Business Analytics | Data Warehouse | Text Mining

University of Allahabad, Department of Electronics and Communications, Allahabad, India

Aug 2018 – May 2022

B.Tech. Computer Science & Engineering; GPA – 9.33/10.00

Relevant Coursework: Database Systems | Data Structures | Design and Analysis of Algorithms | Big Data Analysis | Image Processing| Advance Concepts of Programming Language

WORK EXPERIENCE

Data Scientist Intern, UL Solutions, Northbrook, IL

May 2023 – Present

- Leveraged advanced SQL techniques, statistical analysis, and machine learning algorithms to extract actionable insights from extensive datasets comprising over 300,000+ rows and 60+ columns, unveiling valuable patterns, trends, and correlations for prospective clients
- Optimized business processes and user experiences by analyzing and quality assuring PowerBI applications and dashboards, resulting in a remarkable 20% improvement

Faculty Research Assistant, Syracuse University, Syracuse, NY

Jan 2023 – May 2023

- Utilized advanced natural language processing (NLP) techniques to train computational models on unstructured text data extracted from 3 different social media platforms
- Employed large language models like BERT to boost accuracy by 5% and improve text analysis efficiency, extracting meaningful insights from the last 2 political campaign communication instances on social media
- Created a Python script leveraging the Transformers library to conduct a comprehensive performance benchmark of 10+ Hugging face Generative Pre-trained Transformer (GPT) large language models (LLMs)

Undergraduate Researcher, University of Allahabad, Allahabad, India

Oct 2020 – May 2022

- Forecasted PM2.5 (an air pollutant) of Delhi region utilizing stacked algorithms in Python and improved results by 5%
- Analyzed sentiments of 37,530 Israel English tweets using Natural Language Processing (NLP) and Machine Learning (ML) algorithms

PROJECTS

YouTube Video Analytics: Cloud-Based Data Processing and Insights

Jun 2023 – Jul 2023

- Implemented an end-to-end data processing pipeline on AWS, optimizing data storage, and enabling efficient analysis of structured and semi-structured data from YouTube videos
- Developed scalable QuickSight dashboards utilizing AWS S3, Glue, Lambda, and Athena, transforming diverse data formats within a scalable data lake and generating actionable insights

International Student Expenses Management System

Nov 2022 – Dec 2022

- Collaborated with a team of 3 to identify external data model/logic for 15+ databases and adapted with SQL Up/Down script using Azure Data studio
- Constructed a PowerApps application to collect data of 450 - 500 international students and displayed popular choices of students in university area

PUBLICATIONS/ TECHNICAL SKILLS

Publications: *Sign Language Recognition System using TensorFlow Object Detection API* (Springer),

Sentiment Analysis and Sarcasm Detection of Indian General Election Tweets (Springer)

Programming Languages: Python, R, SQL, HTML, CSS, C/C++, MATLAB

Tools: PowerBI, Azure Data Studio, Docker, MS Excel, MS Access, RStudio, Shiny App, Tableau, Google Analytics, Snowflake

Libraries: NLTK, TensorFlow, Keras, SciPy, Matplotlib, Scikit-learn, pandas, NumPy, Pytorch, Seaborn, Pyspark

AWS: S3, Glue (Crawlers, ETL Jobs), Lambda (Triggers), Athena, Identity and Access Management (IAM), QuickSight, CloudWatch

Statistical Test: Hypothesis, T-Test, ANOVA, Chi-Square, A/B , Pearson Correlation, Principal Component Analysis (PCA)

ML Algorithm: Decision Trees, Random Forest, XGBoost, Support Vector Machines (SVM), Naive Bayes, KNN, Neural Networks, LSTM

LEADERSHIP EXPERIENCE

Project Lead, UL Solutions, Northbrook, IL

May 2023 – Jun 2023

- Managed a team of 8 interns for a Snowflake project, implementing agile scrum practices to prioritize tasks
- Collaborated with 5 cross-functional teams to gather requirements and define project scope to optimize data processes