

SHRUTI RAJENDER GOSAIN

Champaign, IL 61820 || +1(217)904-2695 || sgosain2@illinois.edu || [LinkedIn](#)

EDUCATION

University of Illinois Urbana-Champaign (GPA: 4.0/4.0)

Master of Science in Information Management, May 2025

- Coursework: Data Warehousing and BI, Data Mining, Information Modeling, Data and Statistical Information, Data Visualization

Mumbai University (GPA: 3.6/4.0)

Bachelor of Technology, Information Technology, June 2022

- Coursework: Database Management Systems, AI, Exploratory Data Analysis, Applied Machine Learning, Analysis of Algorithms

WORK EXPERIENCE

Data Analyst - Willis Towers Watson, Mumbai (Full Time)

July 2022 - July 2023

- Optimized the 'Risk Intelligence Central' project, streamlining and automating routine tasks and backend APIs for testing, which resulted in a **78% reduction in manual errors** and improved efficiency, ensuring smooth software releases
- Spearheaded the management of handling backend data, including SQL data editing and release management, causing a decrease in data processing time, **50% decrease in deployment errors** and **saving 10 hours per week**
- Enforced testing processes for the upscaled services, automated solutions for business processes to simplify and avoid any human intervention, and conducted evaluations to ensure they met strict quality standards with a 100% success rate
- Upgraded critical **.NET** and **Azure** projects to the latest versions, leveraging advanced features and functionalities, prompting a 20% improvement in efficacy and optimization

Data Engineer Intern - Infonxy, Mumbai

January 2022 - May 2022

- Orchestrated preprocessing and ingesting raw information, using DBT resulting in streamlined data analysis processes
- Constructed and optimized **ETL data pipelines** using **Snowflake and AWS**, decreasing resource consumption on AWS by **12%**
- Leveraged **Tableau** for data visualization to uncover a significant correlations, leading to the formulation of targeted marketing strategies that contributed to an impressive **8%** boost in overall sales performance

Data Analyst Intern - Tata Consultancy Services, Mumbai

August 2021 - October 2021

- Created and executed a powerful algorithm to **automate stock analysis processes**, fetching and comparing data from multiple sources
- Engineered a **Python-based predictive model** leveraging live and historical financial data by employing **advanced analytics** to assess key financial indicators, market trends, performance metrics and growth rate
- Developed visualizations providing insights into companies that exhibit competitive potential for understanding the market dynamics

PROJECT EXPERIENCE

Data Engineering - ETL and Data Visualization

2023

- Led analysis on attrition and layoffs using Python to clean, process, and manipulate the dataset, achieving **15%** increase in data quality
- Streamlined **ETL** processes for seamless data transfer between **Azure** cloud and local environment, extracting key insights that guided actionable recommendations for reducing attrition rates
- Designed and developed three **interactive dashboards** using **Power BI** providing a holistic view of workforce dynamics along with a detailed breakdown of layoffs at various stages to facilitate targeted analysis

Data Science and Machine Learning - Fraud Transaction Detection

2023

- Executed a comprehensive data exploration strategy on a **700,000-row** dataset to train and validate **Logistic Regression, Decision Trees, and Gradient Boost** models on the preprocessed data to develop a fraudulent transaction detection ML model using **Python**
- Enforced **hyperparameter tuning** in model development, resulting in a **15%** increase in model accuracy and **10%** boost in F1 Score
- Developed a streamlined process for hyperparameter optimization using **grid search** and **Bayesian optimization algorithms**, reducing the time required for fine-tuning model configurations by **30%**, while achieving higher performance metrics

Machine Learning - Automatic Grading of Handwritten Answer Sheets

2022

- Innovated a system in the domain of **Machine Learning, Text detection** and **NLP** where the student could upload handwritten answer sheets that would be automatically graded by comparing them with an ideal answer key, **reducing manual grading time by 80%**
- Integrated **Google Vision API** into the system, enabling accurate extraction of digital text from handwritten answers
- Utilized advance algorithm like the BERT algorithm for converting the text into vectors. Also, used Cosine similarity and Euclidean distance for calculating similarity and converted that similarity measure into a Grade

SKILLS

Technical Skills: Python, Spark, SQL, Angular JS, PHP, ASP.Net, Javascript, C++, MVC Core, NodeJS

Cloud and Databases: AWS (S3, RDS, DynamoDB, Lambda), Azure DataLake, Google Cloud Platform, Firebase, Snowflake

Tools and Frameworks: PowerBI, TensorFlow, Git, Tableau, Django, PyTorch, Keras, XGBoost

Expertise Areas: ML, Exploratory Data Analysis, SQL, Python (NumPy, Pandas, Scikit-learn), PowerBI, AWS

LEADERSHIP AND VOLUNTEER EXPERIENCE

- Volunteered at a national NGO - U&I for teaching Math to underprivileged children, while also being involved in their fund-raising efforts, **raising a net sum of Rs. 7,00,000 or \$8,405.** 2020
- Led my team in KJSCE – Hackathon securing **1st position** out of 84 participant teams. 2019