# SHRUTI RAJENDER GOSAIN
Champaign, IL 61820 || +1(217)904-2695 || sgosain2@illinois.edu || **LinkedIn_ShrutiGosain**

## WORK EXPERIENCE

**Advisor - *Willis Towers Watson, Mumbai (Full Time)***     **July 2022 - July 2023**
- Optimized the 'Risk Intelligence Central' portal, streamlining and automating routine tasks, 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**.
- Upgraded critical **.NET** and **Azure** projects to the latest versions, leveraging advanced features and functionalities, prompting a 20% improvement in efficacy and optimization.
- Enforced testing processes for the upscaled services, conducted evaluations to ensure they met strict quality standards with a 100% success rate and collaborated with cross-functional teams to identify and resolve technical issues, **minimizing downtime by 30%.**

**Data Engineer Intern - *Infonyx, Mumbai***     **January 2022 - May 2022**
- Orchestrated preprocessing and ingesting raw information for Flybuys, 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 **PowerBI** 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, and performance metrics, providing insights into companies that exhibit competitive potential.
- Developed interactive dashboards to present growth rate figures visually, **increasing user understanding and engagement by 36%.**

## PROJECT EXPERIENCE

**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 **AWS** 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.

**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.

**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, R, 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, Flask, TensorFlow, Git, Tableau, Django, PyTorch, Keras, XGBoost
**Expertise Areas:** ML, Exploratory Data Analysis, SQL, Python (NumPy, Pandas, Scikit-learn), PowerBI, AWS

## 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

## 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**