

# AKANKSHA SINGH

Chicago, IL | 765-543-8247 | akankshasingh2704@gmail.com | linkedin.com/in/akankshasingh1997/ | github.com/akanksha-2797

## PROFILE

Results oriented data scientist with 5 years of experience in analytical decision making in retail, sports, technology, and pharmaceutical industries, currently seeking an environment to utilize my skills to facilitate business-oriented outcomes.

## SKILLS

- **Languages:** Python (Pandas, Matplotlib, NumPy, Scikit-learn, NLTK, Beautiful Soup, Selenium), SQL, R
- **Tools and Technology:** Machine Learning, Deep Learning (Keras, Tensorflow, LSTM), Git, AWS, Azure, Databricks, Airflow, GCP – BigQuery, Excel, Snowflake, SAS EM, Hadoop, Pyspark, Tableau, PowerBI, Jupyter
- **Certifications:** Certified Analytics Professional: Informs, Machine Learning Scientist with Python, AWS Certified Cloud Practitioner, Azure Fundamentals, Operations Research with SAS Optimization, SQL Advanced

## EDUCATION

**Purdue University, Daniels School of Business**

**West Lafayette, IN**

*M.S. in Business Analytics and Information Management (CGPA 3.72/4 Beta Gamma Sigma)*

**August 2024**

**SRM Institute of Science and Technology**

**Chennai, India**

*Bachelor of Technology in Electronics and Communication Engineering (CGPA 3.8/4)*

**May 2019**

## PROFESSIONAL EXPERIENCE

**Ernst & Young (EY)**

**Chicago, IL**

**Senior Consultant - Data Scientist**

**October 2024 - Present**

- Assisted in building a Consumer Intelligence Plug and Play platform to model Consumer Lifetime Value, create customer segments and predict churn for the Retail and Consumer Products industry.

**Purdue University**

**West Lafayette, IN**

**Data Scientist - Krenicki Research Center**

**Nov 2023 - Aug 2024**

- Enhanced branded medicines growth strategy by analyzing the influences of key stakeholders in the healthcare space and implementing an ensemble of classification models (XGBoost, Random Forest and LightGBM) to predict the purchase of branded or generic medicines with 92% accuracy for Eli Lilly & Company.
- Optimized process mining by using Open AI Large Language Models (LLM) and a scoring model to improve issue summarization and recommendations for 800+ processes, prioritizing blockers worth \$30M for Accenture.

**Kearney**

**West Lafayette, IN**

**Data Science Intern (Industry Practicum)**

**Jan 2024 – Apr 2024**

- Revamped the existing supply chain forecasting framework for a large welding equipment manufacturer, using a blend of neural network and time series models, achieving 30% improvement in MAPE across 13,000+ materials.

**Mu Sigma Inc.**

**Bangalore, India**

**Project Manager**

**Oct 2022 – July 2023**

- Led a team of 7 decision scientists, supporting the advanced analytics, business intelligence and digital analytics workstreams of a sports retailer, generating \$1 million annual revenue for Mu Sigma.
- Designed a budget forecasting tool for effective and accurate budget allocation by using market mixed modeling and regression techniques across 10+ media channels, leading to an 8% increase in ROAS.
- Conducted sentiment analysis on product review data for multiple launch events, utilizing NLTK for text preprocessing, TF-IDF for feature extraction, and a Random Forest classifier, achieving an 86% accuracy rate and providing actionable insights into customer sentiments.

**Data Scientist**

**Oct 2019 – Sept 2022**

- Facilitated targeted marketing across customer personas for a sports retailer by developing an ML-based clustering solution and predicting the likelihood of repurchase with 86% accuracy, using classification techniques such as XG Boost, resulting in an increase in conversion rate by ~14%.
- Streamlined the Data Quality Framework across 2 geos by developing an ML driven anomaly detection approach to perform checks against the consistency, and accuracy of data and set up automated email alerts using SMTP for proactive notifications, resulting in a 60% reduction in the resolution turnaround time.
- Re-engineered ads campaign performance measurement using A/B testing and multi-touch attribution techniques for a home improvement retailer, improving performance measurement efficiency by 30%.

## ACADEMIC PROJECTS

- **Cryptocurrency Portfolio Optimization-** Built a Neural Network (LSTM) based model to predict the closing rate of 10+ cryptos with an automated framework to buy/sell stocks and optimize portfolio to maximize returns.
- **Improving Craigslist Classification System-** Developed an image and text classification methodology using Neural Network and classic ML classification models to reduce the misclassification rate by 31%.