AKSHARA RAGHAV

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Summary

A versatile data analyst and machine learning enthusiast who thrives in fast-paced environments and leverages financial acumen, advanced problem solving skills and expertise in supply chain optimization for making data driven strategic business decisions

Education

University of Illinois Urbana-Champaign, Gies College of Business **Champaign, IL**
Master of Science in Business Analytics (STEM), GPA: 4.0/4.0 Aug 2023-May 2024
SRM Institute of Science and Technology **Chennai, Tamil Nadu**
Bachelor of Technology in Chemical Engineering, GPA: 3.85/4.0 Jun 2015- May 2019

Advanced Core Skills

Programming Languages: R Programming, Python (Numpy, Scikit Learn, Pandas), Java, C++, Minitab
DBMS: MySQL Server, NoSQL, MongoDB, Oracle, Amazon Aurora, PostgreSQL
Software: MS Excel, MS PowerPoint, Tableau, Power BI, Apache Hadoop, Apache Spark, SAP, MySQL Workbench, Anaconda
Cloud Based Tools: MS Azure, AWS, IBM Cloud Pak for Data, Google Cloud Platform
Ongoing Skill Development: Qlik, Snowflake, Visual Basic
Subjects of Interest: Enterprise Database Management, Project Management, Supply Chain Analytics, Entrepreneurial Studies

Professional Experience

❖ **Graduate Research Assistant** **Champaign, IL**
 Gies College of Business **Jan 2024- May 2024**
- Quantified the effects of legislative decisions on crowdfunding for public schools by performing a difference in differences causal analysis
- Deduced that legislative bills like the 'Every Student Succeeds Act (ESSA)' have caused a 11.9% increase in local donations and 15% decrease in overall net non-local donations
- Affirmed that philanthropic contributions to lower SES schools reduced after passage of the ESSA bill

❖ **Data Analyst Intern- Business Practicum** **Champaign, IL**
 Caterpillar Inc. **Aug 2023-May-2024**
- Developed a highly interactive suite of forecast accuracy visuals to facilitate effective analysis and reporting
- Provided insights into forecast accuracy based on key metrics by conducting comprehensive weight and cost statistical analysis
- Improved discrepancy identification by designing interactive visualizations to compare the difference between forecast and actual runs
- Boosted forecast reliability by 75.2% by estimating forecast accuracy over varying time intervals

❖ **Senior Data Analyst** **Rajasthan, IN**
 Vedanta Resources- Hindustan Zinc Limited **Dec 2019-Jan 2023**
- Identified key process improvement opportunities by collaborating with cross-functional teams namely Production, Quality, Information Systems & Finance and drove continuous improvement initiatives
- Improved user-developer goal alignment by developing detailed screen interface designs as per individual project requirements
- Established communication transparency by developing a decentralized, dynamic dashboard for key performance indicators (KPIs)
- Fostered a progressive data dissemination environment between cross locational teams by scheduling monthly community meets
- Achieved 99.2% daily operational efficiency and optimal performance by meticulously supervising high-level supply chain activities
- Achieved 99.92% production reliability by developing an advanced process control (APC) system, utilizing model predictive control and real time data analysis to automate operations.
- Minimized excess power consumption from 48.44 to 44.23 KWH/MT and achieved a 3% improvement in overall equipment effectiveness by developing a logarithmic machine learning algorithm to predict current consumption

Projects at Gies College of Business

- Generated an ideal restaurant menu by accessing and converting unstructured restaurant data into Pandas data frames using Python, transporting it to Azure SQL Server and writing queries to derive business insights
- Developed a Logistic Regression, Decision Tree and KNN classification models to compare the prediction accuracy Developed and compared loan defaulting prediction accuracy of classification models like Logistic Regression, Decision Tree and KNN machine learning models using Python and harnessed Tableau to profile a loan defaulter
- Evaluated previous purchase history of customers to deduce key insights on shopping preferences, high potential market opportunities and effects of gender, seasonality and payment methods on purchasing
- Generated interactive visuals on most sold tokens, net worth, top buyers and royalties paid to creators from secondary sales of 'Cryptopunks' NFT using Flipside, MongoDB and KNIME
- Quantified the impact of unforseen disasters on airline stock performance by conducting textual analysis of annual reports and developing a descriptive linear regression model that explains the effect of stock price fluctuation on airfares
- Utilized neural network principles in building a 98.31% accurate model that predicts the median property value of Boston homes

Certifications

- **IBM Data Analyst-** IBM
- **Microsoft Power BI Data Analyst-** Microsoft
- **Microsoft Azure Fundamentals-** Microsoft
- **Six Sigma Green Belt-** AIGPE