Raj Mehta

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Education

University of Illinois at Urbana-Champaign

Aug 2023 - May 2024

Masters of Science in Business Analytics (GPA: 3.92)

Relevant Courses: Database Management, Predictive & Statistical Analysis, Business Intelligence, Decision Modeling, Data Mining, Data Storytelling, Data Visualization, Machine Learning

NMIMS Mukesh Patel School of Technology Management and Engineering

July 2017 – May 2021

Bachelor of Technology in Information Technology

Experience

Discovery Partners Institute

Chicago, Illinois

Data Engineer

December 2023 – May 2024

- Engineered a sophisticated grant-tracking platform with AI-driven matching and web scraping, increasing successful grant applications by 35% and reducing search time by 50%
- Implemented AI matching and Python web scraping to improve grant relevancy by 30% and process effectiveness
- Developed a RAG-based researcher matching system using Google Scholar data, boosting project success rates by 25% and reducing researcher identification time by 30%

KPMG Mumbai, India

Business Analyst

April 2023 - July 2023

- Spearheaded a cross-functional team to create visually compelling Power BI dashboards, leveraging advanced data visualization to achieve a 15% reduction in operational costs through data-driven optimization strategies
- Automated the legacy licensing platform using ASP.NET, SQL, Python and A/B testing, improving efficiency by 20% and reducing processing time by 60%

Data Analyst July 2021 - Mar 2023

- · Automated SAP licensing processes using Python, SQL, and JavaScript, reducing processing time by 60%
- Created frontend dashboards with JavaScript, REST APIs, and SQL analytics, enhancing stakeholder insights by 45%
- Led compliance project across five regions, managing 200+ entitlements and optimizing license parameters, reducing licensing spend by 10% while maintaining compliance

Projects (Github)

Movie Plot Similarity with NLP / Python

- Applied NLP techniques (tokenization, stemming, TF-IDF vectorization) to transform unstructured plot text into structured data, analyzing 500+ movie plots
- Utilized KMeans clustering to analyze narrative similarities between films, creating visualizations that uncovered relationships and patterns in 80% of the dataset

Inventory Analysis / Tableau, SQL

- Designed a Tableau project for inventory analysis, providing insights into inventory management and optimization for a dataset of 10,000+ items
- Created interactive dashboards visualizing key metrics like turnover, stock levels, and trends, resulting in a 25% improvement in inventory turnover rate

Statistical Modelling for Property Valuation / R

- Developed multiple regression models in R to estimate property values based on housing features, optimizing predictive accuracy by 20% using the Random Forest algorithm
- Constructed end-to-end machine learning workflow from data preprocessing to training models, predicting property prices with a 90% accuracy rate

Yelp Dataset ETL and Analysis / Python, SQL, Azure

- · Extracted, transformed, and loaded over 5 million Yelp records into an Azure MySQL database
- Performed exploratory data analysis and visualization within Jupyter notebook using pandas, matplotlib, seaborn, and SQL queries on integrated, generating insights that increased customer engagement by 15% in test regions

Technical Skills

Languages: Python(pandas, numpy, matplotlib, seaborn), SQL, R, SAS, JavaScript, HTML/CSS, Bash, Wolfram

Databases: MySQL, PostgreSQL, MongoDB, Oracle, HDFS

Analytics Tools: Tableau, Power BI, Microsoft Excel, Amazon AWS Services, Google Cloud Platform, Hadoop, Knime, Spark

Certifications: Microsoft Azure Fundamentals, Knime Basics