

DHRUV RAO

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WORK EXPERIENCE

Data Engineer

Applied Algorithms Lab

Storrs, CT, USA

(June 2024 – Present)

- Conducted detailed spend analysis & market research on large datasets, identifying trends to improve resource allocation by 40%.
- Designed predictive models for risk assessment, achieving 63% accuracy in forecasting outcomes & decision-making processes.
- Developed data-driven strategies using spatial analysis, reducing project timelines and improving operational efficiency.
- Automated end-to-end data enrichment processes, ensuring accurate reporting, stakeholder communication, & actionable insights.

Business Intelligence Analyst

University of Connecticut

Storrs, CT, USA

(January 2023 – May 2024)

- Managed cross-functional projects, maintaining 95% uptime for internal systems and streamlining project tracking workflows.
- Spearheaded interactive dashboards for spend analytics, improving data visualization and enabling 25% faster decision-making.
- Automated repetitive tasks using Python scripts, reducing manual effort and improving team productivity through agile practices.
- Enhanced project documentation and mapping to align with business objectives while ensuring attention to detail in execution.
- Optimized data pipelines in Databricks to reduce processing time by 37%, enabling real-time insights for strategic planning.

Sourcing Analyst

Zerozilla Infotech Private Limited

Bengaluru, IN

(March – April 2021)

- Delivered executive-level presentations on sourcing opportunities with data-driven recommendations to maximize value creation.
- Conducted market research and created pricing strategies using KPI tracking tools, resulting in a 32% increase in overall sales.
- Built real-time forecasting models improving ownership decisions, reducing operational costs & enhancing supplier negotiations.
- Designed AI-powered tools to analyze customer behavior, boosting engagement rates & reducing churn through insights.

Data Engineer – R&D

SJB Institute of Technology

Bengaluru, IN

(August 2020 – February 2021)

- Collaborated with cross-functional teams to identify risks, mitigate challenges, and ensure timely delivery of sourcing initiatives.
- Deployed scalable microservices architecture to optimize data processing capabilities and streamline procurement workflows.
- Led end-to-end development of sourcing strategies via market research and innovative problem-solving to achieve cost savings.
- Directed end-to-end RFx processes, including requirement gathering, feature analysis, & selection, driving value-based outcomes.
- Configured SAP modules for seamless data processing and financial reporting, significantly improving reconciliation workflows.

Data Analyst Intern

LegalEase Corporate Consultants

New Delhi, IN

(May – July 2020)

- Built interactive dashboards using Tableau to monitor supplier KPIs & agreement expirations for ad hoc business reviews.
- Integrated with stakeholders to identify sourcing opportunities through research, achieving cost savings via vendor selection.
- Generated spend analysis reports using Tableau and AWS RDS, enhancing procurement decision-making accuracy by 15%.
- Drafted SOWs and SLAs to support contract negotiations, ensuring alignment with organizational goals and supplier capabilities.
- Conducted supplier performance benchmarking using KPIs, enabling data-driven negotiations & improving supplier efficiency.

PROJECTS

Investment Strategy Analysis

- Analyzed investment strategies using Modern Portfolio Theory and Python, allocating \$100K across stocks and the S&P 500. Delivered insights on risk, returns, and market trends, showcasing data-driven decision-making and financial modeling skills.

Media Procurement Intelligent Engine

- Built an ML-based recommendation engine leveraging user ratings and viewing history to predict preferences. Conducted data analysis on streaming trends & visualized results in Power BI, improving decision-making for personalized content strategies.

Spotify Recommendation System

- Developed an unsupervised learning model to recommend songs based on user preferences. Used Silhouette and Elbow methods for cluster evaluation, delivering insights to improve content discovery, user engagement, and personalized recommendations.

SKILLS

Programming Languages: Python, R, SQL, NoSQL

Data Tools: ETL, Power BI, Tableau, Microsoft Office

Machine Learning: Pandas, NumPy, Scikit-learn, TensorFlow

Cloud & Big Data: AWS, Azure, MongoDB, SAS, SAP

EDUCATION

University of Connecticut

Master of Science (M.S.) in Computer Science and Engineering

Storrs, CT, USA

August 2022 - May 2024

Visvesvaraya Technological University

Bachelor of Engineering (B.E.) in Computer Science and Engineering

Bengaluru, IN

August 2017 - July 2021

PUBLICATIONS

Detection of COVID-19 Infection from Chest X-Ray Images using CNN

(Digital Image Processing – Published March 2021)