RAJ NATHWANI

Data Scientist | Predictive Analytics Expert | Healthcare Solutions | Machine Learning Specialist

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Summary

Machine Learning and Data Science professional with 3+ years of experience in AI-driven solutions, predictive analytics, and large-scale data processing. Expert in Power BI, SQL, and managing datasets with millions of records. Achieved 35% faster processing with an AI-driven prior authorization model and enhanced risk stratification in healthcare by 28% using NLP and deep learning.

Education

University of Texas at Dallas — Dallas, Texas, USA
Master of Science in Business Analytics and AI — 08/2023 - 05/2025

KJ Somaiya College of Engineering — Mumbai, India
Bachelor of Technology in Computer Engineering — 08/2017 - 06/2021

Experience

ZeOmega — Dallas, United States
Data Science Intern — 08/2023

- Automated 60% of approvals and cut processing time by 35% with an AI-driven prior authorization model (XGBoost, NLP).
- Improved early intervention by 28% by developing an SDoH-based risk stratification model using BERT and LSTMs.
- Reduced false claim approvals by 18% using Isolation Forest & Autoencoders for fraud detection (90% precision).
- Boosted reporting accuracy by 40% with Power BI dashboards integrating real-time ML outputs and SQL-based data pipelines.
- Optimized payer-provider workflows by collaborating with cross-functional teams to implement ML insights.

LTIMindtree — Mumbai, India
Senior Analyst — 06/2021 - 06/2023

- Improved demand forecasting accuracy by 27% with SARIMA & LSTM, minimizing stock-outs and inventory costs.
- Lowered inventory costs by 18% by controlling real-time demand sensing through historical trends and market factor integration.
- Enhanced supply chain efficiency by qualifying SQL queries for real-time inventory tracking and forecasting.
- Accelerated decision-making by 35% through interactive Tableau dashboards for forecast accuracy and supplier performance.

LogicSysTech — Mumbai, India
Data Science Intern — 05/2020 - 11/2020

- Increased revenue by 15% by obtaining demand-optimized pricing using an XGBoost driven dynamic pricing model.
- Boosted marketing conversions by 18% by leading customer segmentation strategies with K-Means and Hierarchical Clustering.
- Improved campaign ROI by 12% by analyzing A/B testing through Bayesian Optimization, reducing ad spend.

Projects

Conagra Hackathon — 04/2024

Developed data-driven strategies to expand Conagra's presence in the meat substitutes market.

- Uncovered a $67M untapped market by analyzing consumer trends, leading to strategic product expansion.
- Optimized product portfolio by identifying key pricing thresholds, form preferences, and effective merchandising strategies.
- Drove substantial weekly sales growth by recommending a new product size tailored to high-demand segments.

FlickFinder — 11/2023

Engineered a Python-based recommendation system

- Engineered a Python-based recommendation system using collaborative and content-based filtering, boosting user engagement by 10%.
- Analyzed 10,000 user data points to refine algorithms, boosting recommendation accuracy by 15%.

Skills

Machine Learning & AI: Airflow · XGBoost · Random Forest · LightGBM · LSTMs · BERT · Autoencoders · Computer Vision

Big Data & Cloud: AWS S3 · AWS Lambda · AWS Redshift · Google Cloud BigQuery · ServiceNow · Google Cloud Vertex AI · Spark · Hadoop · Airflow

MLOps & Deployment: Docker · Kubernetes · FastAPI · Flask · CI/CD Pipelines

Programming & Databases: Python · SQL · R · Pandas · NumPy · PostgreSQL · DAX · MongoDB · Java · .Net

Data Science & Analytics: Predictive Modeling · PowerBI · Power Query · Tableau · A/B Testing · Time-Series Forecasting · Snowflake

Certification: AWS Cloud Practitioner · Data Science With Python · Microsoft Azure Cloud Concepts

Publications

The International Journal of Engineering Research & Technology (IJERT)
— https://www.ijert.org/aufed-automated-front-end-development
AuFED - Automated Front-End Development