

Suraj Patil

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EDUCATION

Northeastern University

Master of Science, Industrial Engineering

Coursework: Machine Learning, Data Mining, Database Management, Probability & Statistics, Operation Research

Boston, MA

GPA 3.7

Savitribai Phule Pune University

Bachelor of Engineering, Chemical Engineering

India

GPA 3.8

SKILLS

Programming: Python (pandas, Scikit-learn, TensorFlow, pyspark), SQL (MySQL, SSMS), R (tidyverse, ggplot)

Tools: Tableau, PowerBI, Advanced MS Excel, SAP, Alteryx, Spark, Databricks, GCP, BigQuery

AI/ML Algorithms: Regression, Clustering, Random Forest, XG-Boost, Neural Networks

WORK EXPERIENCE

Graduate Teaching Assistant

Northeastern University

Boston, MA

September 2023 - December 2023

- Designed and hosted 10 R labs sessions for Statistical Analysis, graded weekly statistics problem sets for 20+ graduate students
- Taught of **R Studio** for data manipulation, statistical analysis, and visualization, for real-world applicability
- Improved student understanding of statistics concepts (t-test, chi-square, ANOVA, Regression, A/B testing)

Supply Chain Data Analyst

Microfine Speciality Products

Pune, India

July 2021 - August 2022

- Created inventory reports using **Python**, identified inventory gaps, visualized findings to communicate supply risks, and recommended sourcing strategy to avoid overstocking, saving \$56K in inventory holding cost
- Used **SQL** queries to analyze complex datasets by cleaning, and validating data for delivering ad hoc reports
- Analyzed historical sales data and trends to improve forecast accuracy using statistical models, increasing OTD metric by 8%
- Collaborated with cross-functional teams to identify key value drivers, defined 10+ KPIs and developed dashboard using **Tableau** enabling stakeholders to manage operations and make informed decisions
- Evaluated 20+ Contract Manufacturers (CM) and negotiated 10% reduction in the proposed amount to establish relations with 4 CM, resulting in \$40K total savings

Supply Chain Analyst

TACO Prestolite (Tata Motors)

Pune, India

December 2020 - May 2021

- Analyzed demand of 2K spare parts & 40+ supplier performance data from SAP ERP system using Excel with ABC analysis to determine safety stock & inventory levels for master data, resulting in reduction of back orders
- Deployed SAP to improve procurement processes, increasing efficiency and accuracy in inventory management and supply chain operations, which improved inventory accuracy by 10%
- Monitored forecast accuracy metrics to identify areas for improvement, and implement corrective actions

Manufacturing Engineering

Katraj Dairy

Pune, India

June 2019 - December 2019

- Utilized Excel to track production data and detect outliers for process control and quality assurance
- Implemented VSM to identify Root Cause in packaging operation to reduce batch size, increasing efficiency by 9%

PROJECTS

Inventory and Procurement Analytics [[know more..](#)] – SQL, Python

July 2024

- Analyzed 1M+ sales data in SQL to identify seasonal demand, top & bottom products, and sales velocity
- Identified 555 SKUs with inconsistency from 2.5M+ Purchase Orders and used Python to visualize insights
- Calculated optimal and safety stock for 8000+ SKUs to recommend stocking strategies

Credit Approval Prediction [[know more...](#)] – Python, EDA, Machine Learning

July 2023

- Reduced credit approval processing time by 75% using machine learning model (Logistic Regression, KNN, Random Forest) and applied SMOTE to overcome class imbalance problem to achieve a precision score of 92%
- Conducted EDA using Pandas and visualized findings with bar charts & box plots via matplotlib to detect outliers