

Saumya Sharma

EDUCATION

North Carolina State University, Raleigh

Aug 2019 - May 2021

Masters of Operations Research

Relevant Coursework - Stochastic Models in Industrial Engineering, Experimental Statistics for Engineers II, Modelling and Analysis of Supply Chain, Database Applications in Industrial Engineering, Applied Time Series Analysis, Multivariate and Longitudinal Data Analysis

Thapar Institute of Engineering and Technology, Patiala

Aug 2013 - Jun 2017

Bachelor of Engineering - Electronics

TECHNICAL SKILLS

Languages: SQL, R Programming, Python, Julia, SAS

Visualization and Data Mapping: Tableau, JMP Pro, Power BI, MS Excel

Statistical Modelling: Regression techniques, Principal Component Analysis, Design of Experiments, Decision Trees, Markov decision Process, Bagging, Boosting, Ridge and Lasso Regression, Forecasting techniques- Double Exponential Smoothing, Croston's Method, Winter's Method, ARMA, ARIMA

Other Software: MATLAB, MS Access, MS Word, MS Office, Jupyter Notebooks

Trainings: Work Process Improvement and Unified Problem Solving (Lean Methodology) Trainings by P&G

EXPERIENCE

Supply Chain Student Consultant, VF Corporation

Aug 2020 – Dec 2020

- Categorized the data with a workflow diagram of the supply chain to recognize necessary parameters for calculations
- Developed multiple Tableau dashboards to alert users on expiring detention and demurrage free days
- Dashboards provides visibility on the number of free and chargeable ongoing days, and instantaneous costs incurred by detention and demurrage categorized according to brand names, Distribution Centres, and logistics carriers which is used to audit invoices

Student Consultant, Lenovo

Aug 2019 - Dec 2019

- Utilized R, Machine Learning tools to create a model to predict Net Promoter score by analysing Customer sentiment data of over 120,000 data points with 80% accuracy
- Defined state of the system, calculated transition probability of the derived metrics and formulated Markov Decision Process using LPP to derive the optimum policy for intervention

Operations Executive, Triptoes

Aug 2017 - Dec 2018

- Improved operating work instruction principles and standardized operation processes (SOP) through cross functional partnerships with procurement and operations
- Drafted KPIs to estimate stock accuracy and reduced backorders by 30% by analysing customer behaviour patterns

Product Supply Intern, Procter and Gamble Private Limited

Jan 2017 - Aug 2017

- Analysed annual and cyclic data to minimize footfall, and optimize warehouse floorplan at the end of line area
- Increased efficiency and reduced 80% losses by eliminating unplanned downtime and stops due to false OCR rejections of final products and reducing rework on the product by 70% leading to 2 FTE reduction at the end of line
- Lead a project to improve productivity on Gillette Vector production lines by identifying bottleneck operations, automating repetitive processes and improving productivity by 25% at the packaging line

PROJECTS

- **Blood Bank Database Management Systems** - Created a database using SQL queries and forms to simplify, and automate the registration process of blood requests and donations while maintaining data of blood donors, receipt Hospitals, blood donation events and utilize this data to maintain optimum blood stock levels
- **Finding Optimal Fibre Drawing Process Settings** - Identified the significant factors involved in the optical fibre drawing process to build an optimization model to predict attenuation and generate a list of optimal settings which minimizes attenuation with 99.7% accuracy using Design of Experiments concepts using JMP
- **Forecasting Daily Ridership in Washington DC** - Designed a model to understand the behaviour of customers and various factors influencing ridership in Washington DC using R and Machine learning tools with 85% accuracy
- **Case Study on Larsen and Toubro Operations** - Analysed the demand behaviour to forecast Spare parts demand by using demand forecasting methods and created a base stock policy model that would provide savings of \$32M
- **Case Study on Sichuan Telecom** - Developed an improved supply chain management strategy by categorizing the existing supply chain into tree system and utilizing a guaranteed service system approach under Multi-Echelon systems to estimate lead times and formulate a new base stock policy resulting in \$25000 savings