Email: kunalj@iitk.ac.in | Contact: 8871885411

<b>ACADEMIC</b>	COUAL	<b>IFICAT</b>	IONS

YEAR	DEGREE	INSTITUTE	CPI/%
2016-Present	M. Tech. (Industrial and Management Engineering)	IIT Kanpur	6.76
2016	B.E. (Industrial and Production Engineering)	SGSITS ,Indore	7.19
2012	Class XII, CBSE	K.V., Shajapur	86.6%
2010	Class X,CBSE	K.V., Shajapur	9.0

#### **AWARDS & ACHIEVEMENTS**

**Academics** 

- Secured AIR 14 in GATE 2016 from Production and Industrial (PI) stream.
- Recipient of Central Sector Scholarship Scheme (CSSS) from CBSE based on percentage in 12<sup>th</sup> board for 4 years from 2012-2016.
- Awarded 3 times by Jain Society for 10<sup>th</sup>, 12<sup>th</sup> and GATE results.

### PROFESSIONAL EXPERIENCE

### SARDA GROUP OF COMPANIES, NASHIK

May'17- July'17

# Title: Analysis of the Flow of Tendu Leaf along the Beedi Supply Chain

- Mapped the whole process in a scientific manner to look for points that can be optimized along the supply chain.
- Identified the **information gaps,** data collection problems, **Problems of unit conversions, accuracy issues** and the questions to be answered at every point of the supply chain to balance the material and further to calculate the wastage.
- Suggested the data that needs to be collected to arrive at a **stochastic model** to estimate the **conversion factors**.

## **CUMMINS TURBO TECHNOLOGIES, DEWAS**

June'15

### Title: Reduction of Cycle Time using Standard Work Combination Sheet(SWCS)

- Calculated cycle time of each machine for calculating annual output and efficiency of machines and operators.
- Plotted SWCS to find the bottleneck operations and recommended feasible changes for removing them.

### **PROJECTS UNDERTAKEN**

## A study of Relationship between Sales and Corresponding Advertising Expenditures: Time Series Approach

Apr'17

- Worked on Time Series data of 36 months which contained seasonality, trend and irregular components.
- Applied SEA, Holt Winter's Exponential Smoothing and ARIMA Models for forecasting the sales and corresponding advertising expenditure and compared them using Correlogram, performing Ljung Box Test and Normality of residuals.

# Analysis of Factors Influencing Fatality Rate in US using OLS regression model

Feb'17

- Studied the impact of factors like availability of doctors, hospitals, per capita income, etc. on the fatality rate.
- Compared 5 subsequent models in R using various statistical techniques and figured out the best fit model.

## Classification analysis on whether to send a direct mail piece to a customer

Feb'17-Apr'17

- Performed data pre-processing to obtain the clean data.
- Trained various models like logistic regression, random forest and neural network on the data.
- Estimated the classification error in each case and then classified the test data.

### **HINDUSTAN EQUIPMENTS PVT. LTD., INDORE**

July'15 – May'16

## Title: Improvement of Process Capability (Cpk) value of Grinding Machine in Machine shop

- Performed Root Cause Analysis on the factors responsible for affecting the Cpk value.
- Prioritized the target factors on the basis of Pareto Principle in order to assess their effect on Cpk.
- Deduced optimum value of the above target factors by varying them and monitoring the change in Cpk.
- Increased Cpk value from 1.35 to 1.48 after eliminating the factors that affect process capability.
- Recommended feasible changes which can be implemented on the machine in the future.

## **POSITIONS OF RESPONSIBILITY**

### Principal Security Officer, Antaragni

Oct'16

• Led a three tier team of Senior Security Officers and Security Officers. Strategically managed the distribution of work amongst them during the events and learned to coordinate patiently even in the tensed situations like crowd control.

### Volunteer, Blood Donation Camp, Raktarpan

Jan'17

• Worked as part of a team to assist the blood donors by signing them in and out of the blood drive and also assisting the donors with anything they needed after they donated.

### **COURSEWORK & SKILLS**

Relevant	Operations Research for Management   Probability & Statistics   Design of Production Systems   Introduction	
Courses	to Computing   Operations Management   Statistical Modelling for Business Analytics   Data Mining and	
	Knowledge Discovery   Advanced Decision Models   Managing Service Operations	
Technical Skills	C   R   MS Office   AutoCAD	