# **Vipul Satone**

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#### **EDUCATION**

**UNIVERSITY OF ILLINOIS** 

**URBANA-CHAMPAIGN, IL** 

Master of Science in Industrial Engineering, May 2019

GPA: N/A

Concentration: ADVANCED ANALYTICS

VISVESVARYA NATIONAL INSTITUTE OF TECHNOLOGY Bachelor of Technology in Mechanical Engineering, May 2014 NAGPUR, INDIA GPA: 3.52/4.0

**PROJECTS** 

#### Prediction of bike ride duration. (Python)

MAR 2017

- Numpy, Pandas and scipy packages were used to prepare and analyse the data.
- Random forest classifier from package sklearn was trained and used to predict the ride duration.

# Segmentation of customers of a multi brand retail store based on their purchasing behaviour. (R)

FEB 2017

- Using VIM and MICE packages in R missing data was visualized and imputed.
- Point of sale data was sorted using SQL queries with the help of sqldf package.
- RMF (Recency, Monetary and Frequency) values were computed and K-means algorithm was used for clustering.

#### Sentiment analysis for 2017 Uttar Pradesh election. (R)

**JAN 2017** 

- Using twitteR package tweets related to the election were downloaded from twitter API. Text mining package tm was used to clean data and convert it into corpus.
- Syuzhet package was used for sentiment analysis. Sentiments from this analysis fairly predicted the election outcome.

### Prediction of house prices. (Python)

**SEP 2016** 

- Different techniques like LASSO, rigid regression and K-nearest neighbours were used to predict house prices from the collected data.
- Gradient descent algorithm was used to model regression.

#### **WORK EXPERIENCE**

Thermax Ltd.

Pune, India

Proposal Engineer

Aug 2014 – Feb 2017

- Used data analytics to optimize product prices.
- Analyzed data to develop different schemes for business growth in various segments like textile, food, capital goods etc.
- Worked with front-end sales team and back-end suppliers for smooth delivery of product to customers.

# CSIR – Central Mechanical Engineering Research Institute

Durgapur, India

Research Intern

May 2013 - July 2013

- Optimization of shell and tube heat exchanger design using MATLAB for mathematical model simulation.
- Computational fluid dynamics based project on blood flow simulation for MDT (magnetic drug targeting).

## **SKILLS**

#### **Technical**

R, Python, Tableau, Julia, MATLAB, MS Office.

# AWARDS AND EXTRACURRICULAR ACTIVITIES

- Selected as a research team leader to mentor undergraduate students on data science project at IGL (Illinois Geometric Laboratory) for Fall 2017.
- 2<sup>nd</sup> place for publishing best paper in IPROMM 16 (Industrial Problems on Machines and Mechanisms) conference, 2016.

## PROFESSIONAL COURSES AND ASSOCIATION

- Industrial and Systems Engineering -Graduate Student Advisory Committee member.
- · Statistical learning (Stanford online)
- Data Visualization with Tableau. (Coursera)
- Optimization methods in Business Analytics. (edX)
- Data Management and Visualization (Coursera)