ASHWANI PRABHAKAR

M.Tech (Industrial & Management Engineering) ashwanip @iitk.ac.in | +91 9559437274

ACADEMIC DETAILS

YEAR	QUALIFICATION	EDUCATIONAL INSTITUTION	PERCENTAGE
2018-20	M.Tech (Industrial & Management Engineering)	Indian Institute Of Technology, Kanpur	8.0* (CPI)
2012-16	B.Tech (Mechanical Engineering)	Rajkiya Engineering College, Banda	64.68
2012	Class XII (ICSE)	Little Flower School, Raptinagar	65.5
2010	Class X (ISC)	Little Flower School, Raptinagar	61.8

**upto 2nd semester*

SUMMER INTERNSHIP

Data Analyst Intern at Convergytics Solution Pvt Ltd, Bengaluru *(May-July'19)*

- **Title:** Price optimization of Watches using Hierarchical Bayes Choice Model in R.
- **Data exploration and manipulation:**
  - Preparation of choice data from sales and feature data after preprocessing.
- **Model Building:**
  - All the price segmented data was fed into choicemodelR package in R and different Rbetas file were collected for each segment.
  - Accuracy of each model was calculated by making a function of accuracy which merged Rbetas file and choice dataset and checked if the highest sum of utility in each panel is bought by user, likewise best model for each segment was chosen.
- **Revenue Optimisation:**
  - Splined function was fitted for each panel utility and price datapoints, according to splined function predicted utility of new price point for some elasticity beyond minimum and maximum price for selected item in panel.
  - Designed optimisation equation and constraints and found optimum value of Item so as revenue gets optimised.
- **Packages frequently used: ggplot2, choicemodelR, data.table, gsub, dplyr,plyr, stringr, tidyr, sqldf, rmarkdown, knitr.**

WINTER INTERNSHIP

Data Analyst Intern at Cetpa Infotech Pvt Ltd, Noida *(Dec'18-Jan'19)*

- **Title:** Movie Recommendation System.
- **In this project built 3 different recommendation engines based on different ideas and algorithms. They are as follows:**
  - Simple Recommender, Item Based Recommender, User Based Recommender.
- **Algorithm used Apriori and Eclat, Tool used was Python, Libraries used were Sklearn , Pandas , Numpy, Matplotlib, SciPy.**

ACADEMIC PROJECTS

Data Mining

To predict sales price of house using Advance Regression techniques. *(Aug'18-Nov'18)*

- **Data preprocessing:**
  - The data consisted of 79 explanatory variables, Performed preprocessing and visualized variables for their correlations.
  - Applied Boruta and Random forest to predict important variables.
- **Model Fitting:**
  - Fitted 3 regression models namely Ridge regression, Lasso Regression and Xgboost.
  - Xgboost performed the best with RMSE of .1121, averaged Xgboost and Lasso for prediction of sales Price.
- **Packages used were knitr, ggplot2, plyr, dplyr, corrplot, caret, gridExtra, Rmisc, random Forest, psych, xgboost**

Statistical Modeling for Business Analytics

Analysis of the Factors Affecting Prices of Real Estates *(Jan'19-Feb'19)*

- Carried out multivariate statistical regression analysis to study the factors influencing real estate prices.
- Calculated measure of fit, correlation matrix, performed EDA, heteroskedasticity test and checked for multicollinearity and omitted variable bias.
- Built log-linear, linear-log, log-log and non-linear models and finalized a model with adjusted Rsquared value 0.79 and SER=0.203.

Ethereum Price Prediction using Time Series Analysis *(Mar'19-Apr'19)*

- Checked for Stationarity, Seasonality using various tests and EDA for past 4 year data and predicted Ethereum closing price for 45 consecutive days.
- Built statistical models Exp. Smoothing, AR Model, ARIMA , ADL model and finalized a model with RMSFE=37.22

COURSEWORK AND SKILLS

Relevant Courses	Data Mining and Knowledge Discovery | Probability & Statistics | Statistical Modelling for Business Analytics | Computer Aided Decision Support Systems| Operations Research for Management | Introduction to Computing | Business Management using Cloud | Operation Management | Renewable Energy- Economics, policy and Regulation | Software Project Management
Technical Skills	R | MS Office (Excel, Word, PowerPoint) | HTML | PHP | Python (numpy, pandas, matplotlib, plotly) | SQL |MS PROJECT | Java |

POSITIONS OF RESPONSIBILITY

- **Institute Captain at Rajkiya Engineering College Banda.**

ACHIEVEMENTS & CERTIFICATIONS

- ***Qualified Level 1 of Machine Learning Quiz of Flipkart GRID – Te{a}ch The Machine 2019 and participated in Level 2.***