Aditya Gupta

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ACADEMIC QUALIFICATIONS

Year	Degree	Institute	CGPA/%
2018- Present	M.Tech (Industrial and Management Engineering)	Indian Institute of Technology, Kanpur	7.26*
2018	B.E (Mechanical Engineering)	Madhav Institute of Technology and Science, Gwalior	7.62#
2014	Class XII (M.P.)	Greenfield Higher Secondary School,Indore	79.6
2012	Class X (CBSE)	St. Jude's Higher Secondary School,Khargone	8.6

**upto2nd semester*

SUMMER INTERNSHIP

Project Intern at Invex Corp. Pvt. Ltd. **Mentor:** Zeeshan Haider *May-July 2019*

Problem Statement: The objective of the project was to create an Analytics dashboard for political parties which can be used as a powerful tool in political decision making.

Functionalities: Dashboard includes constituency wise list of voters, Tabs for real time campaign management , Google maps to view the Demographic distribution of Data and Results on Maps , Bulk messaging capabilities, Various reactive visualization for Booths ,Previous Results Analysis to calculate persuadibility , partywise vote distribution and projected turnout.

Tools Used: Created Voter Database using Python Selenium framework and Pyautogui library , R shiny helped in creating interactive webpages and used shiny server to host the dashboard , Used Plivo integration of R for bulk messaging , Used Excel for Booth mapping and Python for cleaning and automating the process of Result analysis calculations.

ACADEMIC PROJECTS

Data Mining

Prediction of House Price using Advanced Regression Technique

- The aim of the project was to predict the House price from the given training dataset with 1460 rows and 76 columns.
- Steps included Data Preprocessing, Data Visualization and Model Building in R.
- Used advanced Regression techniques like **Random Forest** and **Gradient Boosting.**
- **Lasso** and **XGBoost** performed well with a cross validation RMSE score of 0.1121 and 0.1162 respectively

Statistical Modeling for Business Analytics

Time Series Data analysis on Bike Sharing Data

- Inspected the data for **trends, cyclicity, seasonality** and carried out **Data Cleaning** by **Removing Outliers.**
- Applied **ARIMA** MODELS: transformed data into **Stationary Time Series** and identified the **AR** and **MA parts.**
- Chosen best **order parameters** on the basis of **AIC** and **ACF , PACF** plots
- Predicted the demand for bike with 95% and 80% **Confidence Interval.**

Predicting the Price of Used Toyota Corolla Cars

- Created a model to predict the price of used Toyota cars.
- Used **Descriptive Statistics**: Mean, Standard Deviation, Correlation, and Multi-Collinearity & Heteroscedasticity.
- Carried out the **single, multiple** and **Non linear regression** using R to analyze the variation in Price with the independent variables.
- Concluded that inbuilt features such as weight , Fuel Type , Type of Drive of a car has much more effect on determining its second hand value as compared to time variable factors like Kilometer run and Age.

Academic Term Papers

Stochastic Processes – Page Ranking Algorithm

- A brief Mathematical study of Page Ranking Algorithm starting with the basic idea to formulating it **mathematically** along with its implementation and limitations.
- The process includes formation of **Google matrix** and **teleportation matrix**.

Operation Management – Equilibrium evolution in two – echelon supply chain with financially constrained retailers

- In an inventory system, levels of system such as factories, warehouses, retail outlets etc. are referred as Echelons.
- Studied the models for the effects on supply chain performance due to **retailer's capital structure**.

COURSEWORK AND SKILLS

Relevant Courses	Data Mining and Knowledge Discovery | Advanced for Statistical Modeling Business Analytics| Statistical Modeling for Business Analytics |Probability & Statistics |Stochastic Processes and its Applications | Operations Research for Management | Operations Management | Computer Aided Decision Support Systems
Technical Skills	Python (numpy, pandas, matplotlib) | R | R Shiny | Java| MS Office (Excel, Word, PowerPoint) | MySQL

POSITIONS OF RESPONSIBILITY

- Elected as a Senator, *Student's Gymkhana*, IIT-Kanpur representing M.Tech batch of 2017. (*2019-'20*)

ACADEMIC AWARDS AND ACHIEVEMENTS

- Secured 99.23 percentile in GATE-2018 examination.
- Completed Machine Learning A – Z through R and Python course by SuperDataScience Academy on udemy.
- Awarded **'B'** certificate in **NCC**. *(2017)*
- Worked under Brakes Department in a team project for BAJA 2016 organized by SAE-India to design an All Terrain Vehicle(ATV). *(2015-'16)*
- Won 3rd prize in **Interschool Science Exhibition** in class 10th. (*2011*)

HOBBIES AND INTERESTS

Reading Newspaper , Running , Play Flute and Harmonica

LinkedIn Profile Link- linkedin.com/in/aditya-gupta-a43aa6167