Ajay Nehra

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Data Science Consultant with 6+ years of experience in designing data driven solutions across CPG, Payment and Risk domain. Highly skilled in working with structured and unstructured data and in deploying machine learning algorithms on big data using various computational tools like R, Python and MATLAB. Interest areas lies in exploring NLP

EDUCATION

B.Tech in Civil Engineering, IIT Kanpur ***7.1/10*** **Jul 10-May 14**

TECHNICAL SKILLS

Programming Languages	**R, Python**, pySpark and Hadoop, C, MATLAB, HTML, **Hive**, SAS, **SQL,** VBA
Supervised ML Techniques	**Linear and Logistic Regression**, Random forest, **Mixed Models** & Neural networks
Unsupervised ML Techniques	*K*-mean and hierarchical clustering, **Principal component Analysis**
Statistics	Sampling, Hypothesis testing, ANOVA, Probability distributions, Bayesian Analysis

WORK EXPERIENCE

SENIOR ANALYTICS CONSULTANT MCKINSEY & COMPNAY Nov19-Present

- Working on optimizing price and margin management strategies for CPG clients using econometric modelling
- Led a team to developed scalable pricing workbench to be used across clients and geographies using Mixed Models
- Optimized and fully automated the modelling framework using Jenkins, Git & R and data servers
- Developed a Bayesian regression model to design a effective promo advisor solution

SENIOR CONSULTANT ERNST & YOUNG Oct 17-May-19

- Developed credit risk scorecards using Logistic regression for major banks in UAE, Qatar, Kuwait and India
- Led a 3 member EY team to validate existing credit risk models for corporate and retail portfolios for banks
- Designed and implemented stress testing modules for banks to measure Basel Pillar 1 and Pillar 2 risks
- Devised methodologies using time series forecasting in R to convert TTC PDs into PIT PDs
- Designed a Standalone **ECL calculator** in **R** and **Shiny** by modelling key ECL, components **PD, LGD and EAD**
- Recalibrated the corporate rating scale to new Central Tendency (CT) of default using logarithm transformation
- Developed **Artificial Neural Network** (ANN) model to quantify EY's attrition rate by utilizing HR database

ASSOCIATE CONSULTANT MASTERCARD ADVISORS Jan 16-Jun 17

- Created a customer acquisition strategy for merchants using k-means clustering on Mastercard's transaction data
- Developed a portfolio optimizer for the banks by creating spend based clusters using Mastercard's internal transaction level data |Estimated the potential spend value and then benchmarked it against current spend value
- Developed a classifier in R using multinomial Logistic regression to drive propensity scores for all the products

❑ Proposed a **dynamic pricing model** for digital hoardings in collaboration with **Uber**, model takes into input the nearby traffic data and the profile of the customers and allows the merchants to bid for advertisement

*** This solution was awarded most innovative solution in the Mastercard Innovation forum*

BUSINESS ANALYST FRACTAL ANALYTICS Nov 14-Dec 15

- Developed a **Marketing Mix Model (MMM)** using log linear regression on sales and marketing data to measure ROI of media channels and recommended product specific media channels to devise optimization in marketing strategy
- Build **pricing models** for region level promoted product groups (**PPGs)** and recommended optimized pricing and discount strategy using the price and discount elasticities obtained from the model results
- Designed a simulator in VBA to generate different marketing and pricing scenarios based on model results

SCHOLASTIC ACHIEVEMENTS

- Secured All India Rank **1771 (**percentile: **99.61) in JEE** 2010 and All India Rank **2574** (percentile **99.76)** in AIEEE 2010
- Recipient of Merit-cum-Means **(MCM) Scholarship at IIT** providing full waiver in course fees and monthly stipend
- Won **2 H.E.A.R.T** "Highlighting Excellence and Recognizing teamwork" awards at **Mastercard Advisors**
- Filed **6 patents** on behalf of **Mastercard Advisors** in future payments methods and banks & merchant solutions