

Piyush Verma

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EDUCATION

University of Cincinnati, Carl H Lindner School of Business, Cincinnati, Ohio
Master of Science in Business Analytics | GPA: 3.7/4

August 2018

IIT Kharagpur, India

Master of Technology in Metallurgical Engineering | GPA: 8.1/10.0

May 2014

Bachelor of Technology in Metallurgical Engineering | GPA 7.7/10.0

May 2013

SKILLS & CERTIFICATIONS

Machine Learning: Linear and Logistic Regression, K Nearest Neighbor, Cross-Validation, Variable Reduction Methods, Decision Trees, Ensemble Models, Clustering Methods, Neural Networks, A/B Testing, Hadoop
Libraries: ggplot2, caret, dplyr, tidyr, pandas, numpy, scikit-learn, plotly
Software: R, SQL, Python, SAS, VBA, RShiny, Apache Spark, Tableau, GitHub, Arena, , MS Excel, Hive
Certificate: [Data Science Certificate](#) , a 10-course specialization by John Hopkins University on Coursera

EXPERIENCE

[Quantum Analytics](#)

July 2014 – April 2017

Loyalty Analyst (Retail Team)

Loyalty Rewards Program

- Analyzed billion rows of data collected from the loyalty card transactions done by supermarket shoppers
- Devised, maintained and delivered to executives an excel based customer health dashboard with 150+ product metrics to identify gaps and profitable channels in the ongoing loyalty rewards program
- Built a customer propensity model to predict whether a customer is going to redeem a reward coupon
- Delivered Customer Churn analysis to understand impact of campaigns on customer shopping behavior
- Moved to Sydney Australia as a **Subject Matter Expert** (2016)
- Led a team of MicroStrategy software developers and client's Business Intelligence team to deploy the Quantum Solution in-house (Sydney, Australia)

Customer Segmentation

- Performed customer segmentation based on customers' shopping pattern using customer value & share of wallet models
- Programmed stored procedures in SQL creating reproducible code pipelines to refresh segments weekly

Results

- Chain of insights led client to revamp its \$500 million loyalty rewards program and introduced a 0.5% base cash back on every loyalty card linked transaction for every loyalty customer
- Revamping program improved scanning of loyalty cards by 5% (~450,000 more linked transactions every week)
- Reported a data discrepancy of weekly sales worth \$40 million missing from the client's database

Competitive Intelligence Analyst (Insurance Team)

- Applied lasso regression deconstructing competitor's insurance pricing structure to evaluate client's competitiveness for different customer segments
- Built a VBA tool to automate quality assurance checks and modified the tool for other insurance products

ACADEMIC PROJECTS

- [Claim risk analytics for an insurance company](#) (Logistic Regression, Missing Value Imputation, XGBoost)
Identified risky and non-risky policies, estimated cost per claim and created risk profiles for a campaign manager
- [Customer Segmentation for a retail supermarket](#): (Customer Value Model, K-medoids)
Used K-medoid clustering algorithm and Customer Value Model to perform customer segmentation.
- [Predicting text using N-Grams](#): (N-Grams, Text Mining, R Shiny, R)
Built an interactive R Shiny web application which predicts the next word after giving a string of words
- [Classification of dysfunctional stores](#): (K-means clustering, Hypothesis Testing, HR Analytics)
Built a predictive model for retail client identifying their potential dysfunctional store in future using employee data