Piyush Verma

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EDUCATION

University of Cincinnati, Carl H Lindner School of Business, Cincinnati, Ohio **August 2018**
Master of Science in Business Analytics | GPA: 3.7/4

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

Main Skills: R, R Shiny, SQL, Python, VBA, Database structure, Regression techniques (Linear, Multiple, Logistic), Dimension Reduction Techniques (Lasso, Ridge, Stepwise), Sampling Methods (Bootstrap, Cross validation), Clustering or Classification Techniques (K-Means, K-NN, Hierarchical, Support Vector Machine), Ensemble Methods (Decision Trees, Random Forest, Bagging, Boosting, Gradient Boosting, Neural Networks, Big Data Technologies (Hadoop, Spark), A/B Testing, Customer Segmentation, Customer Value Model, Credit Risk /Fraud Detection Analytics, Churn Analysis, Text Mining, Topic Modelling, Recommender System, Personalization and dashboards.

Certificate: Data Science Certificate , a 10-course specialization by John Hopkins University on Coursera

EXPERIENCE

Quantium Analytics

Loyalty Analyst (Retail Team) **January 2016 – April 2017**

- Performed customer segmentation based on customers' shopping pattern using customer value & share of wallet models
- Analyzed a billion rows of daily transaction data done by loyalty card holders generating meaningful insights
- Programmed stored procedures in Teradata SQL creating reproducible code pipelines to refresh segments weekly
- Created excel based customer health dashboard with 150 KPI to identify gaps and profitable channels in the rewards program
- **Promoted** to Sydney Australia as a Subject Matter Expert (2016)
- Led a team of software developers and business analysts to deploy the Quantium Solution in-house (Sydney, Australia)
- **Improved redemption rates from 2% to 4%** by building a propensity model to target customers for a campaign promotion
- Chain of insights led the client to revamp its **$500 million loyalty rewards program** and introduced a 0.5% default cash back on every loyalty card linked transaction
- Revamping program **improved scanning of loyalty cards by 5%** (~450,000 more linked transactions every week)

Competitive Intelligence/Product Analyst (Insurance Team) **July 2014 – December 2015**

- Applied machine learning techniques to deconstruct competitor's 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

- **Music Recommendation System** (R, Collaborative Filtering, Information retrieval techniques)
  Built an information retrieval system recommending new artists to a user based on its music taste similarity with other users
- **Predicting text using N-Grams:** (R Shiny, R, N-Grams, Text Mining, Natural Language Processing)
  Built an interactive R Shiny web application which predicts the next word after giving a string of words
- **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 (Recency Frequency Monetary), K-medoids)
  Used K-medoid clustering algorithm and Customer Value Model to perform customer segmentation.
- **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