

# Piyush Verma

222 Senator Place, Apt 60, Cincinnati, Ohio 45220

■ (513)-658-6482 ■ [vermaph@mail.uc.edu](mailto:vermaph@mail.uc.edu) ■ [Homepage](#)

## EDUCATION

**University of Cincinnati, Carl H Lindner School of Business**, Cincinnati, Ohio

**May 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 7.6/10.0

**May 2013**

## SKILLS & CERTIFICATIONS

**ML:** Linear and Logistic Regression, LDA, KNN, Cross-Validation, Lasso and Ridge Regression, Decision Trees, Random Forest, Bagging, Boosting, Support Vector Machine, PCA, K-means clustering, Hierarchical clustering, A/B Testing, Neural Networks, Sentiment Analysis, Recommender System

**Libraries:** ggplot2, caret, dplyr, tidyr, pandas, numpy, scikit-learn

**Software:** [R \(advanced\)](#), SQL(advanced), Python, RShiny, Apache Spark, [Tableau](#), [GitHub](#), Arena, SAS, MS Excel

**Certificate:** [Data Science Certificate](#), a 10-course specialization by John Hopkins University on Coursera

## EXPERIENCE

**Quantum Analytics**

**Between July 2014 – April 2017**

**Subject Matter Expert**, Sydney Australia (Retail)

- Tasks**
- Lead a team of software developers and business analysts to implement a Quantum Solution at client's place
  - Selected from Quantum India to directly support client for 10 weeks (July 2016 – October 2016) in Sydney
  - Supported client's team in building multiple reporting layers in MicroStrategy by transferring data knowledge
  - Responsible for assuring data analysis quality by performing checks and passing metrics
- Results**
- Improved scanning of loyalty cards by 5% (~450,000 more weekly transactions)
  - Reported a data discrepancy of weekly sales worth \$40 million missing from the client's database
  - Communicated findings effectively via dashboard that the client revamped its \$500 million loyalty program and introduced a 0.5% base reward earn rate on every transaction

**Analyst, India (Retail)**

- Tasks**
- Used Apache Spark to perform customer segmentation using K-means clustering and Customer Value Model
  - Built a simple propensity model to predict whether a customer is going to redeem a reward coupon
- Results**
- Improved client's data understanding and paved way for generating 3 more projects for Quantum

**Graduate Analyst, India (Insurance)**

- Tasks**
- Applied lasso regression to deconstruct competitor's insurance pricing structure to evaluate client's competitiveness for different customer segments (age, claim history, address, driving experience)
  - Added an extra layer of quality check by integrating excel with SQL table and generating premium trends
- Results**
- Automated quality assurance checks and modified the excel tool for other insurance products

## ACADEMIC PROJECTS

- [Customer Segmentation for a retail supermarket](#): (Customer Value Model, K-medoids)  
Used Partition Around Medoids realization of K-medoids to perform clustering of the customers
- [Predicting text using N-Grams](#): (N-Grams, Text Mining, R Shiny, R)  
Built an interactive R Shiny web application where a user can enter a string of text and the application would predict the next word. The algorithm used here is Katz Back-Off which uses the conditional probability of a N-Gram
- [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