

# Piyush Verma

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

## EDUCATION

---

University of Cincinnati, Carl H Lindner School of Business, Cincinnati, OH

August 2018

*Master of Science in Business Analytics* | *GPA: 3.7/4*

**Courses:** Data Mining I & II, Statistical Methods & Modeling, Statistical Computing, Data Visualization, Big Data, Optimization, Simulation Modeling, Data Management, Probability Modelling

Indian Institute of Technology Kharagpur (IIT Kharagpur), WB (India)

May 2014

*Integrated Dual Degree in Metallurgical Engineering* | *GPA: 3.5/4*

- Recipient of Merit-cum means scholarship for 4 years

## SKILLS & CERTIFICATIONS

---

- **Tools:** R, R Shiny, PL/SQL, Python, Teradata, Tableau, SAS, Advanced Excel, VBA, Arena, C, C++
- **Skills:** Linear Regression, Logistic Regression, Dimension reduction techniques, Cross validation, Clustering techniques (K-Means, Hierarchical), Ensemble methods, Support Vector Machine, Neural Networks, PCA, A/B Testing, Text Mining, Recommender System, Market basket analysis, Risk analysis, Customer Segmentation
- **Certificate:** [Data Science Certificate](#), a 10-course specialization by John Hopkins University on Coursera

## EXPERIENCE

---

Macys, Cincinnati, OH

Jan 2018 – April 2018

*Graduate Student Consultant*

- Worked closely with HR Analytics Manager of Macys in identifying the Bloomingdales stores vulnerable to future dysfunction
- Built a tool in R using logistic regression to predict the dysfunctional risk of a store using 2017 employee and store data
- Identified the employee performance related features driving the risk and generated recommendations

Quantum Analytics, Hyderabad/Sydney

July 2014 – April 2017

*Data Analyst*

- Performed customer segmentation based on customers' shopping pattern using customer value & share of wallet models
- Analyzed a billion rows of card 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 Quantum Solution in-house (Sydney, Australia)
- Improved coupon redemption rates from 2% to 4% by building a propensity model to target customers for a campaign
- 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 rewards program improved scanning of loyalty cards by 5% (~450,000 more linked transactions every week)
- Recommended strategic pricing solutions for new and leading insurers by identifying highly priced market segments and deconstructing pricing structure of competitors
- Automated multiple dashboards which were regularly monitored by senior executives of leading insurance companies
- Started training on the data and business to new starters after 6 months of joining the company

## ACADEMIC PROJECTS

---

- [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.
- [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
- [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