# Vikrant Vinod Patil

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### **EDUCATION**

The University of Texas at Dallas

exas at Dallas Aug 2017 – May 2019

GPA - 3.39

University of Pune, India

June 2013 – June 2017

Bachelor of Engineering (B.E.), Computer Science and Engineering

*GPA* – 3.5

#### SKILLS

Programming Languages: Python, SQL, R, SAS, C++, HTML5, CSS3, Bootstrap Framework, Data Analysis Expressions (DAX)

Databases: MySQL, MongoDB, SQL Server

M.S. Business Analytics (Dean's Excellence Scholarship)

Tools and Libraries: MS Access, MS Visio, Tableau, Power BI, MS Excel, Hadoop, numpy, pandas, matplotlib,

sklearn, lifetimes (Python), ggplot2, tidyverse, dplyr, mice, reticulate, shiny (R)

### **WORK EXPERIENCE**

HealthStream Inc, Nashville, TN

Data Analyst Intern Oct 2018 – May 2019

Analyzed the trends and occurrences of errors in historical data with the help of a dashboard in Power BI

- Developed a R Shiny web application to enable internal stakeholders to view and compare the revenue data in a fast and efficient manner
- Programmed the web application to build dynamic DAX queries with the help of user-specified inputs, to query the tabular data model in Azure Analysis Services
- Developed a method to establish the connection between the R Shiny web application and Azure Analysis Service by using a Python script as an intermediary, referenced the functions created in the Python script, in R, by using R's reticulate library

### **ACADEMIC PROJECTS**

### **Customer Purchase Prediction using Python**

June 2019

- Implemented the modified beta geometric and gamma gamma model using the lifetimes library in python to calculate the customer lifetime value (CLV) and to understand the customer's buying patterns
- Predicted the customers who will make the most purchases, spend the most and simulated the customer's behavior, to find out his probability of being alive, for different time periods

# **Classification of Audit Firms Using Python**

Feb 2019 - Mar 2019

- Programmed classification models using Python libraries (pandas, numpy, sklearn) to predict a fraudulent firm based on the Audit
  dataset (UCI Machine Learning Repository) and compared the accuracy scores of the models
- Implemented classification algorithms like knn, Logistic Regression, Linear SVM, Kernel SVM and Decision Tree and found the best parameter for each of the algorithms by using the grid search function

### **Morris Hite Marketing Analytics Challenge**

Sept 2018

- Led a group of 4 to analyze data and derive insights from a client dataset using R
- Segmented customers using k-means clustering based on frequency and recency of purchases; recommended strategies to acquire more customers and to get a larger share of wallet as compared to the direct competitors by visualizing data in Tableau

# **Predictive Analytics on Shopko Dataset**

Jan 2018 - May 2018

- Led a group of 5 to analyze and extract insights from a real-world retail dataset using SAS
- Performed data cleaning and preprocessing, built predictive models and segmented data using k-means clustering
- Implemented market basket analysis, logistic regression, elasticity model, marcomm analysis and predicted financial implications
  of the suggested marketing strategies; proposed marketing strategies which improved the company revenue by 27%

## Data Analysis Using R

Jan 2018 - Feb 2018

- Performed data cleaning, data preprocessing and exploratory analysis on a real-world dataset from UCI Machine Learning Repository and extracted insights using R
- Implemented Market Basket Analysis using Apriori algorithm to predict frequent itemset and item-based recommendation algorithm based on a customer's past purchasing pattern and visualized data in R using the ggplot2 library

# **Database Management Using SQL**

Aug 2017 - Dec 2017

- Conceptualized and developed a database for a retail store using Microsoft Access
- Developed data input and data manipulation screen forms to populate various attributes of the database and generated reports with the help of sales, revenue and feedback data from the database

# **ACCOMPLISHMENTS**

- On-Board Real-Time Object Tracking System using All-terrain Mobile Robot Patent filed on 18th August 2017 in Patent Office of India (Patent Status: Pending)
- Object Tracking Bot using On-board Jetson TK1: An Approach to Reduce Communication Overhead and Time Delay Research Paper published in IEEE Xplore on 12th April 2018