

VIPANCHI KATTHULA

vkatth2@uic.edu | +1-(312)-918-9344 | Chicago, IL

[linkedin.com/in/vipanchikatthula](https://www.linkedin.com/in/vipanchikatthula) | github.com/VipanchiKatthula

EDUCATION

University of Illinois at Chicago (UIC), Chicago, IL

August 2019 – December 2020

Master of Science in Business Analytics with specialization in Data Analytics

GPA: 4.0

Coursework: Data Mining, Machine Learning, Descriptive Statistics, Big Data Analytics, Business data visualization, Healthcare Analytics, Advanced database management, Deep Learning and Text Analytics.

BITS PILANI, Hyderabad, India

Graduated: May 2017

Bachelor of Engineering in Electrical and Electronics Engineering

GPA: 3.32

PROFESSIONAL EXPERIENCE

University of Illinois at Chicago

August 2019 – May 2020

Graduate Teaching Assistant

- Implemented Descriptive Statistical concepts in R programming in 5 lab sessions of 70 students each
- Aided students with Bayesian statistical concepts, techniques for multivariate regression, time series, and statistical process control. Performed all assistant duties, including mentoring, teaching, researching and clerical help.

UnitedHealth Group, Hyderabad

June 2018 – June 2019

Decision Scientist

- Worked closely with clients, understood their pain points, performed exploratory data analysis in Python and integrated machine learning models into user platforms
- Designed and deployed Tableau decision dashboards for the compliance team of a major retailer to understand possible risks associated with their practices. Helped avert potential non-compliance and regulatory risks worth more than \$2.0M
- Developed Big Data workflows to predict the delivery time of the orders created which improved the operational efficiency of warehousing systems by saving 20 manhours per day
- Created real-time analytical Tableau dashboards to provide insights on performance standards for non-technical end users

Data Engineering Analyst (ETL & SQL developer)

June 2017 – May 2018

- Deployed interactive Reports, Dashboards, and Visualizations for the inventory management teams to help find the decrease in demand and to forecast the demand resulting in planned operations
- Developed data pipelines and workflows to extract the data from different source systems and loaded the required entities to target databases for reporting purposes using stored procedures
- Collaborated with global businesses and developed **SQL Server data warehouse** for inventory. Created and managed database objects including tables, indexes, and procedures
- Developed jobs and performed health check of complex SQL queries for filtering and transformation of the raw data for cleansing

ACADEMIC PROJECTS

Amazon's Twitter Sentiment Analysis: (Python, Pandas, Numpy, Spark)

February 2020

- Analysed sentiment from 400k tweets on amazon's handle using Spark to predict if a customer is happy or dissatisfied with delivery service

Improving EMR utilization for Chicago Clinic: (R, ggplot2, Supervised Machine Learning Concepts)

January 2020

- The goal is to improve the usage of a mobile application by patients. Developed models to find key parameters influencing the patient behaviour. Applied Machine Learning concepts to get the variable importance. **Random Forest, SVM (RBF Kernel)**

Text similarity between documents: (Python, scikit-learn, nltk, Natural Language Processing Concepts)

January 2020

- Calculated similarity between documents using TF-IDF scores to categorize a set of documents into different buckets like News, Education, etc. Performed data pre-processing and applied NLP Similarity concepts to capture the resemblance

Digit Recognition: (Python, Keras, Neural Networks, Unsupervised Machine Learning Concepts)

January 2020

- Developed Convolution Neural Network (CNN) model to predict hand-drawn digits from MNIST dataset while achieving an accuracy of 97.24%

Boosting customer engagement at VMWare: (R, ggplot2, Supervised Machine Learning Concepts)

October 2019

- Built decision tree models for VMWare to improve customer engagement and predict the customer retention rate and achieved a recall of 91.8 %. Machine learning algorithms used: Random Forest, XGBoost, LASSO Regression, Ridge Regression

TECHNICAL SKILLS

- Programming and Software:** R, Python (NumPy, Pandas, Sci-Kit Learn and Matplotlib), Pytorch, Keras, sklearn, Tableau, Git, Microsoft Office Suite, SQL (SQL Server Management Studio), Alteryx
- Databases:** Hadoop, Oracle DB, Microsoft SQL Server and Netezza SQL
- Analytics:** Excellent knowledge of inferential statistics, Data Mining, Linear programming, A/B Testing
Machine learning algorithms - K-Nearest Neighbour, Linear regression, Logistic regression, Decision and regression Trees, XGBoost, Random Forest, SVM, LASSO, Ridge Regression