VARUN KAUSIKA

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EDUCATION

The University of Texas at Austin   May 2023

Master of Science, Business Analytics [GPA: 3.82/4.0]

- Relevant Coursework: Predictive Modeling, Optimization, Information Management

National Institute of Technology, Tiruchirappalli   May 2022

Bachelor of Technology, Chemical Engineering, Minor in Computer Applications [GPA: 8.7/10.0]

- Relevant Coursework: Calculus, Statistics, Linear Algebra, Database Management Systems

EXPERIENCE

Dell – *Data Science Capstone Project,* Austin, Texas   January 2023 - Present

- Capacity Planning - Working as a part of the Customer Financial Services team to dynamically optimize levers such as team meeting hours, outages and overtime hours to match 26 week forecasted order volumes against agents and resources required to improve operational efficiency and semiannual staffing.

FedEx – *Robotics Process Automation Intern,* Mumbai, Maharashtra   June 2021 - October 2021

- Web scraping automation - Developed an algorithm to scrape dropdown bars, tables, and text boxes of any given website. Generated a spreadsheet view of data using Selenium and Pandas. Tested on over 50 public domains.
- Query generation - Built a web service for data pooling and visualization. The app aggregated first and second party data from disparate sources; utilities to recommend, execute and display results of PL/SQL queries were provided.

IIT Madras – *Research Intern,* Chennai, Tamilnadu   November 2019 - May 2020

- Developed a novel algorithm called piMF to decompose concentration time series data of any chemical reaction into underlying coefficient and extent matrices using an alternating least squares approach (pending publication).

ACADEMIC PROJECTS

End-to-end Spotify Genre Detection System   Winter 2022

- Utilized Google Bigquery ML to perform K-means cluster analysis to segment songs into genres based on audio features of top tracks and user playlist data obtained through Spotify Client API. Cloud database was setup in order to test custom models and tune hyperparameters; app was deployed in Google App Engine.

Collage Based Restaurant Rating Prediction   Fall 2022

- Predicted customer sentiment of Yelp businesses using computer vision. Preprocessed and assembled collages in Open-CV; implemented VGG-like CNN architectures in Tensorflow to regress images into stars. Obtained a 20% accuracy boost from baseline naive classifier.

Competitive Analysis of Luxury Car Market   Fall 2022

- Leveraged discussion forums from edmunds.com in entry level luxury forum and conducted sentiment analysis and topic modeling using Word2Vec; visualized all brands on a multi-dimensional scaling map w.r.t chosen attributes.

TECHNICAL SKILLS

- Programming: Python, Scikit-learn, Pandas, Numpy, Flask, Pytorch, SpaCy, Open-CV, Scipy, Gurobi, R, C++
- Data Manipulation: Excel, PL/SQL, Oracle, MongoDB, BigQuery, Spark
- Data Visualization: Tableau, Seaborn, Matplotlib, Plotly, Bokeh, ggplot

ADDITIONAL INFORMATION

Work Eligibility: Eligible to work in the United States with no restrictions.