SHIVANG ARYA

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EDUCATION

The University of Texas at Austin	Master of Science in Information Technology and Management Overall GPA: 3.84/4	May 2020
NMIMS University, Mumbai	MBA (Tech): 5-year integrated course in MBA (Technology Management) + B.Tech (Computer Engineering)	May 2019

TECHNICAL SKILLS

- **Data Science:** Statistical Methods, Predictive Modeling, Dimensionality Reduction, Machine Learning, Natural Language Processing, Neural Networks (using CUDA/GPU cores), Artificial Intelligence
- **Data Engineering:** Data ETL (Extraction, Transformation and Loading), Spark, PL/SQL, Data Pipelines, HDFS (Hadoop Distributed File System), Map Reduce
- **Programming Languages:** C/C++, Java, Visual Basic (MS Excel macros), MATLAB, R/RStudio, Python, SAS, Kotlin (Android)
- **Web Technologies:** HTML, CSS, JavaScript, PHP, Flask
- **Cloud Computing:** Amazon Web Services, Google Cloud Platform

EXPERIENCE

Dell Technologies Inc. – *Research Scientist, Capstone Project;* Austin, Texas   Jan 2020 – May 2020
- Implemented a high capacity imputation model for time series data based on generative adversarial networks.
- Achieved 98% cosine similarity on average when comparing synthetic data from the algorithm with real values.
- Created a Docker application to deploy this solution.

HDFC Capital Advisors Limited – *Management Trainee, Investments;* New Delhi, India   May 2018 – Sep 2018
- Calculated an average rate of return of about 16%, with the help of market analysis and financial modeling, on private equity and debt investments in real estate projects worth over $25M.

Nokia Networks Private Limited – *Technical Intern, Router Configuration;* Mumbai, India   May 2017 – Jul 2017
- Remote router configuration and troubleshooting to maintain connectivity within mobile networks as well as reduce downtime.

Bharti Airtel Limited – *Intern, Information Technology Department;* Gurgaon, India   Jun 2016 – Jul 2016
- Developed an automated system for formatting and uploading data dumps, increasing efficiency of the process by 67%.

DATA ANALYTICS PROJECTS

- **Business Data Science – FIFA Manager:** Finding the optimal replacement for a football (soccer) club's outgoing player using similarity scores and recommender systems. Moreover, suggesting the best playing 11 given a budget and a formation.
- **User Generated Content Analytics – YouTube Clickbait:** Topic modeling and sentiment analysis on over 2500 YouTube thumbnails and titles to predict if the video will go viral. Found that a thumbnail depicting travel and having a negative title increases engagement by 20%.
- **Marketing Analytics:** Finding the customer lifetime value, time series forecast for sales using Winters' method and an optimum marketing budget allocation strategy for Olist e-commerce website.
- **Big Data and Distributed Programming:** Music recommendation system using Spark based on a user's song history and cosine similarity with other users; Movie recommendation system using item based and user based collaborative filtering.
- **Application of Business Analytics:** Regression on Principal Components to conclude that physical factors such as age, weight and body surface area are responsible for 96% of the variation in blood pressure.

APPLICATION DEVELOPMENT PROJECTS

- **Emerging Technologies (IoT):** Programmed a raspberry pi to receive step count from a microbit and weather data from an android application. This data is used to tune a machine learning model to obtain daily goals which are displayed on the application.
- **Advanced Programming and App Development – Event Management System:** Android application and a website to create, join, modify, and delete events with different admin and user functionalities.

ADDITIONAL INFORMATION

Publication: Does 'Femvertising' matter? A study in the Indian context – *International Journal of Research and Analytical Reviews*
Interests: Chess and Football (soccer)