Prathamesh Satyawan Mahankal

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SKILLS AND ACHIEVEMENTS

- **Technical Skills**: Microsoft Office Suite (Outlook, Excel, PowerPoint, Publisher, Word), Python, R, SQL
- **BI Tools**: Tableau, IBM Cognos, Google Analytics, Advanced Excel, Power BI, Adobe Analytics
- Won the **Rising Star** award at **NASA's** International Space Apps Challenge Hackathon 2019 (out of 100+ participants).
- Highly organized, analytical and motivated individual that can take initiative.

PROFESSIONAL EXPERIENCE

The University of Washington, Seattle, USA   January 2020 - Present
Graduate Teaching Assistant (*SQL Server Management Studio, Lucidchart, Tableau, Power BI*)

- Helping students understand several DBMS concepts like Entity-Relationship Modeling, Database Design and Normalization, Querying, Transaction Management, Views, Stored Procedures, Functions, Joins, NoSQL and Database Applications.
- Collaborating with industry experts to formulate real-world projects to enable the best learning experience for the students.

Bank of America, Mumbai, India   June 2017 - August 2019
Data Analyst (*Python, R, SQL, Advanced Excel, IBM Cognos, KDB+/Q, Tableau*)

- Collected, cleaned and analyzed large unstructured equity trade data, as a part of a multicultural Big Data Analytics team.
- Demonstrated an ability to work in a collaborative team setting but can also manage independent projects.
- Created analytical data visualizations using Tableau to assist the clients in understanding their trade activity better.
- Spearheaded the development of multiple ETL pipelines for creating standardized data repository from disparate sources.
- Automated productivity metrics reporting within the team using scripting, thus saving 20+ man-hours per week.
- Collaborated with cross-functional teams and contributed towards research, build and deployment of several reporting components.

CoE-CNDS (Center of Excellence in Complex & Nonlinear Dynamical Systems), VJTI, Mumbai, India   August 2016 - May 2017
Project Manager (*WirelessHART system, Amazon Web services, Flask and Python*)

- Led a team to develop an Industrial IoT project that used the Wireless Hart technology for collecting humidity and temperature data.
- Uploaded this real-time data to the AWS platform to perform exploratory data analysis using cloud-based services.
- Maintained effective communication with the team and the stakeholders to ensure project efficiency and collaboration.

EDUCATION

The University of Washington, Seattle, USA   September 2019 –Expected May 2021
Master of Science - Information Management - Data Science
Relevant Courses: Natural Language Processing (NLP), Business Intelligence, Machine Learning, Statistical Modeling, Strategic Leadership

Veermata Jijabai Technological Institute (VJTI), Mumbai, India   August 2013 – May 2017
Bachelor of Technology - Electronics Engineering
Relevant Courses: Computer Programming, Statistics, Applied Mathematics, Image Processing, Data Mining, and Business Intelligence.

RELEVANT PROJECTS

Using Behavioral Science to Fight Climate Change (*Clustering, Random Forest, Classification*)   October 2019

- Designed a web platform that analyzes county-wise environmental metrics and uses inference-based Machine Learning algorithms to detect the exact problem faced by that county and suggest tasks to individuals based on the problem.
- Won the **Best Customer Validation** award among 100+ participants at the Techstars Startup Weekend Seattle hackathon.

Retail Business Process Improvement (*Research, Literature Review, Time Series*)   December 2019

- Researched the problems faced by a departmental store at the UW and applied data-driven problem-solving to develop business models that resulted in improved profits, better customer service, reduced food wastage, and increased employee engagement.
- Performed Time-Series Analysis using ARIMA to forecast demand for each item, thus facilitating better inventory management.

Movie Recommendation System (*NLP, Python, Text Mining*)   June 2019

- Built a content-based filtering type recommender system that implements text mining using cosine similarity and movie metadata.
- Improved the existing model by developing a more personalized Item-Based Collaborative Filtering model.
- Leveraged a latent factor model to handle issues of scalability and sparsity, thereby achieving an RMSE of 0.89 on the test set.

Customer Segmentation Analysis (*kMeans, Trend Analysis*)   February 2019

- Implemented behavioral analytics techniques to understand customer trends and determine what drives customer loyalty.
- Identified customer segments using the Recency, Frequency, Monetary (RFM) segmentation model and proposed personalized marketing strategies to tackle complex technical challenges independently and improve user engagement and retention.

Text to Speech Using Tesseract OCR Engine (*Keras, Tensorflow, CNN*)   August 2016

- Designed a system to capture an image, extracted all the text from it, and then converted this text file into a .wav file.
- Developed a script to binarize the image and pass it through a Tesseract OCR system using the pytesseract module.
- Incorporating additional features to recognize handwritten texts using Keras and Convolutional Neural Networks.