Mushrifah Hasan

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SUMMARY

Motivated and detail-oriented data scientist with a 1+ years of experience working in machine learning, predictive analytics, data analytics and visualizations. Enthusiastic about Deep Learning, collaborative, positive attitude and always exploring and learning.

PROFESSIONAL EXPERIENCE

Data Scientist, ***Mobicule Technologies Pvt. Ltd*** | *Mumbai, India* ***Oct 2022 - Present***

- Developing end-to-end data pipeline for analytics dashboard with **Python, Airflow, and Superset** resulting in reducing dashboard downtime and increasing stakeholder engagement.
- Improving the collection efficiency and recovery of assets by identifying patterns in payment behavior and predicting which customers are most likely to default using **classification and clustering-based machine learning algorithms.**
- Automating campaign rules creation for effective collection strategy by personalized communication with customers at the most optimal time and mode of communication using classification and rule-based algorithms.
- Increasing the response time and interaction with the user by developing a chatbot to provide answers to aggregate-based queries based on the private database (i.e. text to SQL) using **openai API, Python, and Rasa**.
- Collaborated with cross-functional departments to integrate ideas into products and develop AI-based solutions for the **mCollect debt collection platform.**
- Identify key **business KPIs and metrics** by leveraging Machine Learning and Business Intelligence techniques.

Machine Learning Intern, ***Mobicule Technologies Pvt. Ltd*** | *Mumbai, India* ***Sept 2021 - Sept 2022***

- Conduct **Descriptive Statistics, Exploratory Analysis, and Data pre-processing** as well as implement Machine learning algorithms to derive insights.
- Apply **data modeling and predictive analytics** in BFSI, Telecom Industries, and working with large complex datasets along with classification and clustering-based machine learning algorithms.
- Automating identifying and allocating realistic, achievable targets based on profile and demographic conditions by analyzing historical and predicted data along with a rule-based strategy.
- Demonstrate strong problem-solving and communication skills in a team environment.

TECHNICAL SKILLS

- **Languages/Tools**: Python, SQL, Apache Superset, Docker, Git, Tableau, Grafana, Pyspark, AWS
- **Libraries/Frameworks**: Flask, Rasa, Pandas, NumPy, Matplotlib, Scikit-Learn, MLflow, Kubeflow, Airflow, FastApi, Streamlit, Keras, TensorFlow, BeautifulSoup, PyTorch, FastAI

PROJECTS

Depression Detection Based on Sentiment Analysis in Social Media Using Deep Learning

- The dataset is created by scrapping tweets with keywords depicting depression.
- Implements a two-step depression detection system using deep learning language modeling in **Keras, Tensorflow,** and deployed the model as a **web application** with **Flask**.

Stress Detection in Tomato Plants with thermal images using Deep Learning

- The thermal images of tomato plants are collected using a thermal camera.
- Trained **deep convolutional neural network** using ResNet-34 architecture in **PyTorch** and deployed the model as an Android application with the help of the **Flask** server.

PUBLICATIONS

- Data-driven Depression Detection System for Textual Data on Twitter using Deep Learning, IEEE, 2022
- Application of Deep Learning Coupled with Thermal Imaging in Detecting Water Stress in Plants, Book: Design of Intelligent Applications using Machine Learning and Deep Learning Techniques, 2021
- Image Processing based Application of Thermal Imaging for Monitoring Stress Detection in Tomato Plants, IEEE, 2019

EDUCATION

Sardar Patel Institute of Technology, Mumbai ***Dec 2020 - Sept 2022***
MTech, Computer Engineering (CGPA: 9.85/10)

Computer Vision Nanodegree, Udacity ***Oct 2019 - Feb 2020***

University of Mumbai, Mumbai ***Jul 2016 - Nov 2020***
B.Tech, Computer Engineering (CGPA: 8.12/10)