

# Mushrifah Hasan

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[Linkedin Profile](#) | [Website](#)

## SUMMARY

Motivated and detail-oriented data scientist with a master's degree, skilled in data analytics, visualizations, predictive analytics, and machine learning. Enthusiastic about Deep Learning, collaborative, positive attitude and always exploring and learning.

## TECHNICAL SKILLS

**Key Skills:** Python, SQL, Apache superset, Docker, Keras, TensorFlow, Pyspark, Flask, Tableau, Grafana, AWS, Git.

## EDUCATION

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

**Computer Vision Nanodegree, Udacity** ([View](#)) (2019 - 2020)

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

**Data Foundations Nanodegree, Udacity** ([View](#)) (2018)

## WORK EXPERIENCE

**Data Scientist: Mobicule Technologies Pvt. Ltd** (Oct 2022- present)

- Identify key **business KPIs and metrics** by leveraging Machine Learning and Business Intelligence techniques.
- 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.
- Collaborated with cross-functional departments to integrate ideas into products and develop AI-based solutions for the **mCollect debt collection platform**.
- 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**.

**Machine Learning Intern: Mobicule Technologies Pvt. Ltd** (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.

## PROJECTS

**Depression Detection Based on Sentiment Analysis in Social Media Using Deep Learning** ([View](#))

- 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** ([View](#))

- 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 ([View](#))
- 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 ([View](#))
- Image Processing based Application of Thermal Imaging for Monitoring Stress Detection in Tomato Plants, IEEE, 2019 ([View](#))