Muskan Rath

Data Scientist

Contact: +91-7008798811
Email: muskanrath30@gmail.com
Linkedin profile url: https://www.linkedin.com/in/muskan-rath/

EXPERIENCE

Manager | IT Executive 2 - Petrochemical department (Data Science)

06/2023
Navi Mumbai, Maharashtra, India

Reliance Industries Limited

- Working on Data Science and Data Visualisation projects.
- Understanding business requirements and delivering projects that align with the needs of the business teams, taking feedback from them, and implementing it in future projects.
- Technologies used: Machine Learning (intermediate), NLP (Basics), Computer Vision (basics), Tableau (advanced)

Associate Software Engineer

10/2021 - 07/2022
Navi Mumbai, Maharashtra, India

Accenture

- Worked in Cloud Transformation domain
- Performing pre-migration as well as post-migration tasks pertaining software applications which were migrated from client's datacentre to cloud platforms like Google Cloud Engine
- Technologies used: Google cloud platform

Software Engineering Trainee

07/2021 - 09/2021
Bangalore, Karnataka, India

Cartesian Consulting

- Worked in SOLUS project as a part of the backend team using SQL and Unix
- Set up pipelines for different brands and provided system maintenance and support of client's databases for log files update, database tables and stored procedures
- Technologies used: SQL, Linux scripting

EDUCATION

Postgraduate Executive Programme in FinTech, AI/ML, Data Science, and Blockchain (PGEPF)

01/2024 - 09/2024

SPJIMR SP Jain Institute of Management & Research

- Executive programme in Fintech, AI/ML, Blockchain, Datascience
- Programme covers Foundations on Finance and accounting, AI/ML, Data Science, Blockchain and their applications on Finance.
- Collaboration with industry leaders and projects with startups like HyrGPT
- Learnings from the programme: Finance and accounting, Data Science, AI/ML, Blockchain, Fintech

International Immersion Program - Study Abroad Module

Nanyang Technological University Singapore

- Blockchain and Credit Risk Analysis

Postgraduate Degree, Artificial Intelligence and Data science (PGP-AI&DS)

07/2022 - 06/2023

Jio Institute

- Completed projects on subjects like Machine Learning, Deep Learning, Computer Vision, Deep Learning with Computer vision, Speech Processing
- Study abroad module at Nanyang Technological University (NTU) , Singapore- In the international immersion program organised by Jio Institutes, I successfully completed 2 modules ;"Blockchain Technology" and "Credit Risk Analysis"

CGOA | 8.36 / 10

Bachelor of Technology (B.Tech), Computer Engineering

08/2017 - 07/2021

International Institute of Information Technology, Bhubaneswar

- Completed Bachelor's in Computer Engineering

CGPA | 8.28 / 10

AISSCE, Science

08/2015 - 05/2017

D.A.V. Public School, Chandrasekharpur

SKILLS

Technologies-

Machine Learning (intermediate) . Deep Learning (intermediate) . Natural Language Processing (basics) . Computer Vision (basics)

Programming Languages-

Python . R

Data Analysis Tools-

Tableau . Excel

Cloud Platforms-

Azure (basics) . Google Platform (basics)

Database-

MySQL database

Operating Systems-

Windows . MacOS . Linux

TRAINING / COURSES

Introduction to Data Science in Python - Coursera

Mathematics for Machine Learning: Linear Algebra - Coursera

Introduction to SQL - DataCamp

SQL (Basic) Certificate - HackerRank

Introduction to R

Programming for Data Science (from IBM) - Coursera

Time Series Analysis (ARIMA) with R - Coursera

Tableau Essential Training - LinkedIn

Fundamentals of Visualization with Tableau - Coursera

Get Ready for Generative AI - LinkedIn

Better Business Writing in English - Coursera

Improving Communication Skills - Coursera

PROJECTS

Predicting credit card default

- Responsible AI Final project which involved predicting whether customers will default based on their credit score, checking for biases in data, model and evaluating the classification-based Machine Learning models using fairness metrics
- **Skills:** Machine Learning, Responsible AI (basics)

UlweTel (Customer churn in telecom sector)

- Prediction of customer churn and understanding various factors influencing customer churn using supervised Machine Learning algorithms (classification problem)
- **Skills:** Data Analysis, Machine Learning

Digital Twin Technology to Optimize Biopharmaceutical Manufacturing Process (Capstone Project)

- Using input parameters to predict the output & creating an API which will detect the process parameters required to get the optimal output of the product
- **Skills:** Machine Learning, MySQL, Domain knowledge

Summarization of Technical Document Using Language model

- The aim was to solve the problem of scientific paper summarization using a supervised learning approach alongwith fine tuning a BERT model
- **Skills:** Natural Language Processing (NLP), Machine Learning

Early sepsis prediction using Machine Learning algorithms

- The problem statement was to predict sepsis 6 hours or more prior to clinical detection using ML algorithms.
- **Skills:** Machine Learning, Data Analysis

How does Facebook Object Detection and Image Captioning work (Proof of Concept)

- The primary motive of this project was to use both Deep Learning and Computer Vision to understand how does object detection and image captioning work, how is it done by Facebook and also covers aspects on Data Acquisition.
- **Skills:** Deep Learning, Computer Vision

Tableau Dashboard of YouTube trending section

- A tableau dashboard of the YouTube trending videos was
- created **Skills:** Tableau

Self-Driving Cars using Classic Computer Vision techniques

- In this project, four critical components of self-driving cars were examined, namely, Vehicle Detection, Lane Line Detection, Traffic Light Classification and Road Segmentation using Classic Computer Vision, Machine Learning. Deep Learning was used only for scenarios when it was necessary.
- **Skills:** Machine Learning, Deep Learning, Computer Vision

Custom NER model for legal domain and use of Transformers for question answering

- In this project, custom NER models were created and these models were used to label data for legal domain as a base and build a system for information extraction and question answering
- **Skills:** Deep Learning, Natural Language Processing

Age or Gender Recognition

- The issue statement is to identify an individual's gender or age based on their acoustic vocal characteristics. This is possible with machine learning classification methods, especially supervised learning. The dataset consists of 3,168 recorded voice samples, collected from male and female speakers
- **Skills:** Machine Learning, Speech Processing (basics)

Speech Emotion Recognition

- Developed a machine learning model utilizing the RAVDESS dataset & librosa library for audio feature extraction, achieving over 70% accuracy in predicting four emotions (calm, happy, fearful, disgust)
- **Skills:** Machine Learning, Speech Processing

LANGUAGES

English	Proficient
Hindi	Proficient
Odia	Native
Spanish	Beginner