Vaibhav Malik

Data Scientist

Experienced postgraduate from IIT Kanpur with 2 years of Data Science expertise at Halliburton. Proficient in end-to-end ML models, addressing diverse ML/AI challenges: failure prediction, anomaly detection, segmentation, sentiment analysis, and more. Enthusiastic, curious, and dedicated to delivering impactful data-driven solutions. Strong collaborator with excellent communication skills, translating complex concepts effectively. Passionate about making a positive impact through data science.

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WORK EXPERIENCE

Data Scientist
Halliburton

08/2021 - Present *Bangalore, India*

Achievements/Tasks

- **Built regression, classification, and neural network** models (CNN, RNN) for oil rig **failure prediction, anomaly detection** using sensor data, salt **segmentation** in a large oil fi eld (UNET architecture), **sentiment analysis** , and job run time prediction using ML and deep learning.
- Led **end-to-end** ML algorithms: data collection, ingestion, preprocessing, feature engineering, model development, and deployment.
- Extensively utilized **AWS SageMaker** for model training and deployment.
- Contributed to client **proposals** , providing ML/AL-based solution approaches.
- Leveraged Microsoft **Power BI** for **data modeling** and developed statistical business diagnostics.
- Proficiently used **Python libraries** : Pandas, NumPy, Sci-kit Learn, TensorFlow, Statsmodels, Spacy.
- Developed **Streamlit** based thin client UI for frontend of deployed ML models.
- Troubleshot complex software issues as a **backend developer** for the Seismic Engine team, performed UI automation using **Protractor** for web application testing.

EDUCATION

M.Tech
IIT Kanpur

07/2019 - 06/2021 *9.75 CPI*

Thesis

- Title: "Modelling of Direct Chill (DC) casting to enable horizontal integration with homogenization and rolling processes"
- Objectives: • To develop a 2-D mathematical model of DC caster using ANSYS-Fluent. • To obtain parameters required for empirical modelling of as-cast structure and properties. • To get structure and properties using empirical models to provide a horizontal linkage with the downstream process.

B.Tech
NIFFT Ranchi

07/2015 - 06/2019 *8.2 CGPA*

Project

- "High Strength Aluminum Alloys"

SOFTWARE SKILLS

Language: Python, Java

Python Libraries: Numpy, Pandas, Matplotlib, seaborn, Scikit-Learn, Statsmodel(TSA), spacy (NLP), OpenCV, YOLO

IDE: VS Code, Eclipse, PyCharm | FrontEnd : Streamlit

Software skills: AWS Sagemaker, DS365.ai, Seismic Engine, Power BI, Orange

Visualization: Power BI | Database: SQL

CFD: Ansys Fluent, OpenFOAM

CERTFICATIONS

Udemy: Power BI masterclass from scratch (04/2023)

Udemy: Python for Time Series Data Analysis (05/2022)

Udemy: Natural Language Processing with Python (04/2023)

Udemy: Computer vision python OCR and object Detection quick starter (05/2023)

Udemy: SQL programming basics (06/2023)

ACHIEVEMENTS

AIR 127 (GATE 2019), AIR 108 (GATE 2020)

Academic Excellence award 2020 and 2021 (two times in a row) for obtaining highest CPI in MTech program

Accomplished end-to-end data analytical project within one week, including thorough work and impactful presentation.

LANGUAGES

English
Full Professional Proficiency

Hindi
Native or Bilingual Proficiency