**INDHRA KIRANU N A**

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**SUMMARY**

A highly motivated Data Scientist streamlined data pipelines & extracted insights using big data tools. Expert problem framer & root-cause analyst. Built & deployed ML models driving tangible business value. Collaborative, passionate innovator seeking to amplify data-driven impact.

**EXPERIENCE**

**Daimler Trucks Innovation Center (Mercedes Benz Research & Development) – Bengaluru, India**

*Data Scientist**May 2021 – Present*

* An early detection and forecasting of electric Axle component failure in e-powertrain by training Auto Associative Multi-Layer Perceptron Neural Network resulting in two weeks early forecast of the vehicle downtime
* Built battery health pipeline on Azure Databricks processed sensor data, identified key degradation KPIs, leading to 5% reduction in warranty claims and a Power BI reports for tracking and optimizing maintenance.
* Developed an automated data-based charging scheduling strategy using a novel hybrid technique, resulting in a projected 1.5% reduction in energy consumption.
* Scripted an efficient temperature forecasting solution for optimal vehicle operations and extended system life, improved the existing business metrics.
* *Developed an ML-based Python tool* that identifies critical safety issues in customer vehicles 90% faster than manual methods. Utilized unsupervised clustering algorithms on multi-variate time series data from vehicle loggers, enabling early detection of potential failures and preventing costly recalls.

*Post Graduate Engineer Trainee**Nov 2020 – May 2021*

* Developed a cloud-based, ML-powered battery life modeling project for buses using Azure Databricks, enabling customers to extend battery lifespan, parallel Git version control improved the accuracy over time.
* Uncovered deeper system features and performance insights by using limited data and domain expertise, through advanced statistical analysis - affinity analysis.
* Promoted to fulltime within 6 months due to strong performance and organizational impact (6 months ahead of schedule)

**Upwork – Freelance, Remote**

*Machine Learning Engineer**May 2020 – Nov 2020*

* Analyzed data from retailers across 6 Countries and used outputs to increase book sales by 4.2% by forecasting sales using Ensemble of models, despite turbulent data.

**EDUCATION**

**Vellore Institute of Technology (VIT) UNIVERSITY – Vellore, India** *April 2020*

* Master of Technology in Controls & Automation; Cumulative GPA: 8.5/1.0
* Machine Learning, Advanced Statistical Analysis
* Master Thesis: Applications of Reinforcement Learning for Predictive Maintenance, Collaborative Robotics & Quantum Machine Learning for Telecom applications.

**SKILLS**

**Programming Languages**: Python, SQL, R

**Libraries**: Pandas, NumPy, Scikit-learn, Matplotlib, Seaborn, Plotly, SciPy, Statsmodels, TensorFlow, Pytorch, NLTK, Pyspark, Fast.AI

**Modelling Techniques**: Linear Regression, Logistic Regression, K-Means Clustering, Ensemble Models, Decision Trees, XGBoost, ARIMA, VARMA, Neural Networks.

**Data Science & Big Data**: Exploratory Data Analysis, Data Mining, Data Visualization, Statistics, Time Series, A/B Testing, Hypothesis Testing, ETL,Excel, GIT, Microsoft Power BI, Tableau, Microsoft Azure, Databricks.

**CERTIFICATIONS & ACHIEVEMENTS**

* *Microsoft Certified:* Azure Data Scientist Associate
* Kaggle Competition Winner and Kaggle X attendee
* Deep Learning Specialization from Coursera
* Departmental Bronze award for successfully diagnosing and root causing vehicle issues using using Machine Learning.