**INDHRA KIRANU N A**

Whitefield, Bengaluru, India | P: +91 8332832027 | [indhrakiranu39@gmail.com](mailto:indhrakiranu39@gmail.com) | [LinkedIn](https://www.linkedin.com/in/indhra/) | [GitHub](https://github.com/indhra) | [Kaggle](https://www.kaggle.com/naiku007)

**SUMMARY**

A highly motivated Engineer, worked with system engineers in refining system specification and HIL testing using an 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 (DTICI) – Bengaluru, India**

*Engineer* *May 2021 – Present*

* In depth analysis of functional implementations in charging systems using fleet data and testing data.
* *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.
* Auto test case generation of HIL testing in energy management systems.
* An in-depth Issue and Root Cause analysis of Charging and Cooling systems on regular basis to uncover the hidden patterns and faults in the system by exploratory data analysis, using multi-variate time series data from vehicle sensors.

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

* Built battery health pipeline on Azure Databricks processed sensor data, involves data quality checks in SQL & data pre-processing, identified key degradation Key Performance Indicators KPIs, leading to faster data analysis and anomaly detection and a Power BI reports for tracking and optimizing maintenance.
* Uncovered deeper system features and performance insights by data mining, using big data and domain expertise, through advanced statistical analysis - affinity analysis, extracting meaningful insights.
* 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, MATLAB, SIMULINK, ANSYS

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

**Modelling Techniques**: Linear Regression, Naïve Bayes, K-Means Clustering, Ensemble Models, Decision Trees, Random Forest, 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 Machine Learning.