

# **PROFILE IIAAI04**

### **Summary**

- 8+ years of experience in Machine Learning, Statistical, Modeling, Time Series forecasting, Computer vision and Image processing.
- Executing data-driven solutions to increase efficiency, accuracy, and utility of internal data processing.
- Experiences at creating data regression models, deep learning models using predictive time-series modeling.
- Analyzing algorithms to deliver insights and implement action-oriented solutions to complex problems.
- Worked on Supply chain, Insurance and Retail domain.
- Good team player with excellent communication, analytical, written and presentation skills with strong aptitude towards learning new technologies.

## Technical Skills

- Programming Languages: Python.
- **Machine Learning:** Linear regression, Decision trees, Random forest, AdaBoost, Gradient Boosting, XGBoost, Light GBM, Time -Series Models like AR, MA, and ARIMA.
- Deep Learning: Deep learning algorithms CNN, RNN, LSTM
- **Computer vision**: Developing image analysis algorithm and deep learning architecture to solve problems. Designing & creating platforms for image processing and visualization.

## **III**Education

- M.Tech (Machine Drives & Power Electronics) from IIT Kharagpur.
- B.Tech (Electrical & Electronics Engg.) from JNTU.

## Work Experience

#### Work Experience#1

. Oct. 2019 - Present Role: Data Scientist.

Technologies: Python, R, Machine Learning, Deep Learning, Open-CV, TensorFlow and Keras.



#### **Responsibilities:**

#### Developed an Automate the aircraft engine leasing return

• To identify Crack detection and missing engine parts of an aircraft.

 In case of Internal Inspection (Bore scope) a structural similarity model was built to detect defects in the images compared to the before ones using computer vision through image processing.
Build similarity detection model using Open-CV (Computer vision, Image processing) to detect damaged/missing parts of aircraft engine.

- The defects categorized into Major, Medium and Minor defects, depending on the intensity of damage.
- Tested the performance of the end to end workflow and analyzed for improving the model per formance

#### Demand forecasting of aircraft spare parts

- Based on the historical dataset several statistical, machine learning and deep learning models were built to predict order demand for individual product.
- The data was stationary and after several tests.

#### Work Experience#2

Role: Associate Data Scientist. Technologies: Python, Machine Learning, Deep Learning.

#### **Responsibilities:**

#### **Developed Power Distribution Network prediction model**

- Built an effective correlates communication between Load and Generation side point of view of a Distribution Network Operator in a region.
- Built an end to end Auto ML product for time series for automated training and prediction for next day power demand.
- Analyzed and processed the whole process in different scenarios with respect to Power generation and power tariffs changes in whole day
- The number of E-cars required to meet the demand in a given hour & feed-in-Tariff given on a specified day selected by the customer.



#### Developed an custom based object detection API using TensorFlow.

- Created an accurate Machine Learning model capable of localizing and identifying multiple ob jects in a single image.
- Construct, train object detection models. There are many model parameters to config- ure, the best setting will depend on application.
- Faster R-CNN model is better suited as the accuracy is high and latency is of lower priority
- Faster RCNN model is high accurate with slow speed.

#### Work Experience#3

#### July 2012 – Dec 2015 Role: Senior Electrical Engg.

#### **Responsibilities:**

- Execution of the day preventive/predictive maintenance schedule as per assigned for equipment's
- Execute maintenance activity during over
- Routine inspection of equipment's and communicating the abnormalities to shift in charge.
- Preparation of spare parts of the equipment's

## **ACareer Highlights and Professional Achievements**

- Represented School in National Level Hockey at New Delhi.
- Won First Place in Hockey Tournament School Level at Hyderabad.