

# Proposed Solution

- **Problem statement:**

Machine Learning-Based Predictive Analytics For Aircraft Engine by Data science.

- **Idea /solution description:**

- ✓ Predicting the failure prior will save time, effort, money and sometimes even lives.
- ✓ The failure can be detected by installing the sensors and keeping a track of the values.

- **Novelty/Uniqueness:**

- ✓ Supervised machine-learning algorithms for regression and classification were Employed to study patterns in an existing, open-source database of production.

- **Social impact / customers satisfaction:**

- ✓ As literature systematic review of employed ML on PdM for aircraft engine.
- ✓ PdM indicated state of machine to performed schedule to maintenance based on historical data, integrity factors and engineering approaches.
- ✓ DL algorithm widely employed such as image processing, face and speech recognition.

- **Business model (Financial Benefit):**

- ✓ TSFC is also an indicator of engine operating cost.
- ✓ The DNN model performs well consistently for both the training and testing datasets.

- **Scalability of solution:**

Scalable