

## **IDEATION PHASE**

- The predictive maintenance strategies are based on real time data for diagnosis of impending failures and prognosis of machine health.
- The model is capable of correctly predicting engine behavior.
- This also presents an LSTM based prognostics technique for aircraft fault prediction.
- It can be an effective tool for engine design space exploration during the conceptual design phase.
- This model aims to predict the fuel mass flow rate having as an input.
- Thus, the proposed analysis shows that XGBoost and LightGBM is a better choice for predicting the RUL, and for classifying the health state of the aircraft engine.