**Motivation, Literature Review and Project Plan**

Motivation:

1. Increase in Drone Failure Incidents.

* issues with the power supply,
* propeller positioning,
* compass calibration,
* or the flight location

1. Analysis to perhaps better the drone structural model.

* Newer model with less net stress applied upon and lower torque required by rotors during flight.
* Different drone fan shape for better aerodynamics.

Literature Review:

1. Anomaly Detection in Drones with Machine Learning Algorithms

* Detecting anomaly in drone using individual as well as combined sensor data
* Detects state the drone is in using an ensemble of ML models

1. Anomaly Detection for Unmanned Aerial Vehicle Sensor Data Using a Stacked Recurrent Autoencoder Method with Dynamic Thresholding.

* Stacked LSTM Autoencoder-based anomaly detection method combined with a novel dynamic thresholding and a weight loss function, to be applied to Unmanned Aerial Vehicle sensor data.

1. Vibration-Based Fault Detection in Drone Using Artificial Intelligence:

* a fault detection based on the vibration of the multirotor arms using artificial intelligence

Project Plan:

