SRM
INSTITUTE OF SCIENCE & TECHNOLOGY

A NATIONAL LEVEL TECHNO-MANAGEMENT FEST

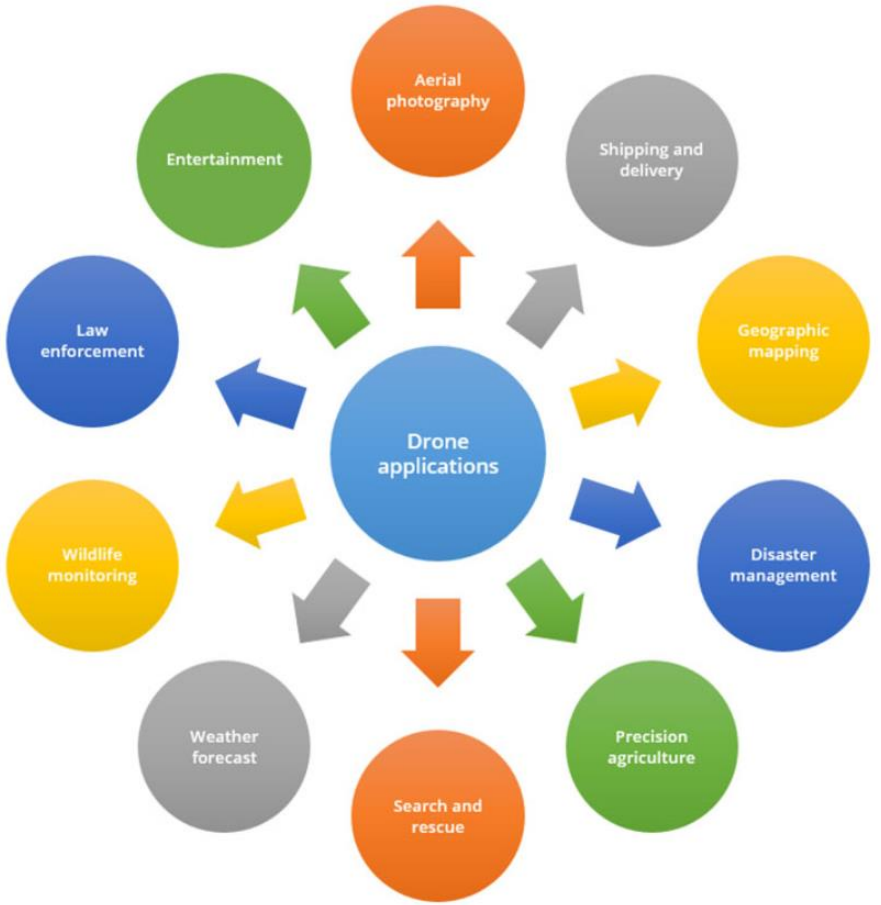
# AARUUSH'21

...rising in the spirit of innovation

# Report submission:

# Drones(UAVs):

- A drone, in technological terms, is an unmanned aircraft. ... Essentially, a drone is a flying robot that can be remotely controlled or fly autonomously through software-controlled flight plans in their embedded systems, working in conjunction with onboard sensors and GPS



# Analyse the parts of the drones:

- Now a days drones are used in multiple ways and multiple fields like oil industry,hemp farming,cattle rustling.

## Parts of drones:

- **Quadcopter frame. This is a structure (frame) in which all the other parts fit in. ...**
- **Motors. ...**
- **Electronic Speed Controller (ESC) ...**
- **Flight Control/Board. ...**
- **Propellers. ...**
- **Radio Transmitter. ...**
- **Battery, Electronics, and Power Distribution Cables. ...**
- **Camera**

# Our objectives:

- We conclude that propeller of the drone is responsible for the gaining of weigh and gaining power.If we reduce the propeller they gaining low weigh at te same time power will be gained.But we want to gain lot of load in this situation our team TECHNO_CHAMPS introduce that the “Air is converted to Energy”.By this way we will continuously gain weight without the disturbance
- In our modern feild we do not lot of things for various purpose we want a simple solution to all our problems .In that way our team also introduce that the air purifieo reduce our environmental condition.
- Finally we are going to resolve the main objectives and problems that is mapping by drone .In this mapping overall coverage of cities is impossible.so we introduce face recognition and pixels to increase the camera quality of drones.

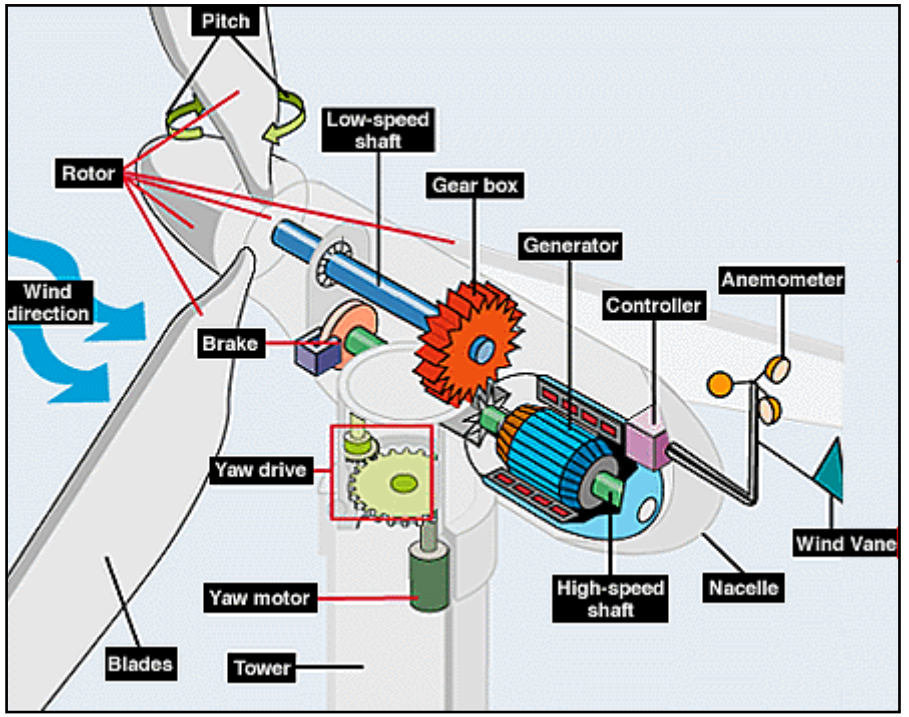
okay lets see how we will done this

# Propellors:

- Drone propellers can be constructed with two, three, or four blades. Propellers with more blades provide greater lift due to more surface area moving through the air per rotation, but are more inefficient due to increased drag. Smaller drones with limited battery life are best suited to propellers with fewer blades
- Heavy-lift drones will typically require longer propellers with smaller pitch, as they require stability rather than speed, and will be able to carry larger batteries or power sources such as hydrogen fuel cells in order to offset the increased requirements.

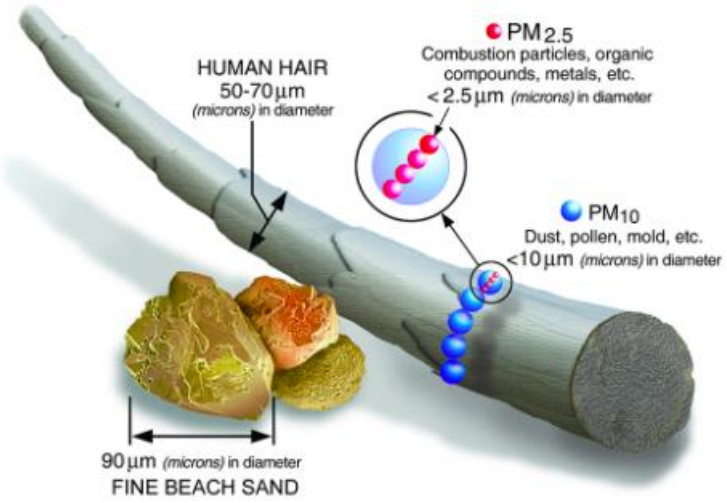
# Converting air into energy:

- pecifically, the air-generator device is able to convert moisture in the air into electricity. The air-gen uses electrically conductive nanowires made out of protein from a special microbe known as Geobacter. The wires are laid out over an electrode surface as thin films that are about 10 micron/micrometre thic
- In drones we are rotating propeller-like blades around a rotor. The rotor turns the drive shaft, which turns an electric generator.
- We will get the electric energy now and our drone is now working continously



# Purify air by drones:

- People in cities with a high volume of traffic, such as Bangkok, try to protect themselves from air pollution by spending most of their time indoors under the protection of air filtration systems.
- The good news is that the drones were able to reduce dust particles, albeit at a modest scale of 10 µg/m3. If successful, these solutions may be used in other parts of the world suffering from frequent air pollution episodes.
- We have also another option that is we are not going to fix the purifier instead the dust air particles are observed and convertes into electric energy and we will use it for drones



# Face recognition:

- Facial recognition is **a way of identifying or confirming an individual's identity using their face**. Facial recognition systems can be used to identify people in photos, videos, or in real-time.
- step 1:face detection

The camera detects and locates the image of a face, either alone or in a crowd. The image may show the person looking straight ahead or in profile

- Converting the image to data:

The face capture process transforms analog information (a face) into a set of digital information (data) based on the person's facial features. Your face's analysis is essentially turned into a mathematical formula. The numerical code is called a faceprint. In the same way that thumbprints are unique, each person has their own faceprint

# Reference links:


- view-source:https://www.airbornedrones.co/
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