



Auto-Drone

Autonomous-Drone

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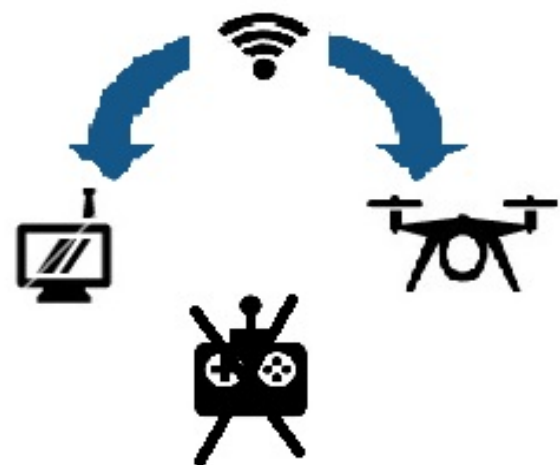
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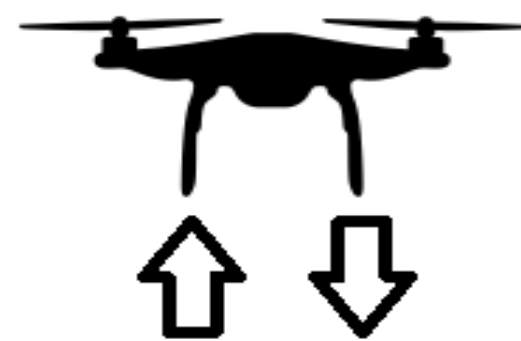


The latest innovation in the aviation industry is the Drone Technology. But, the drones that require manual input are very susceptible to radio interference or radio connection losses and they also have very **limited features**. So, we came up with a solution i.e the **Autonomous-Drone**

Key Features:



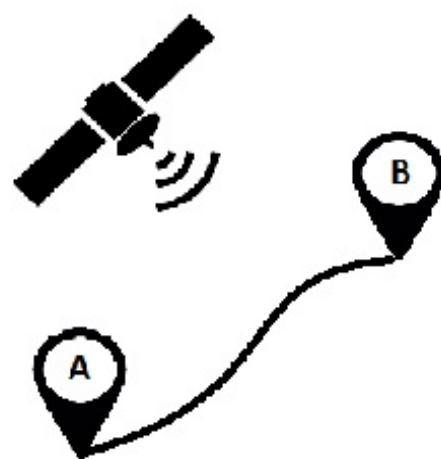
No Manual Input



Auto Take-off and Land



Control from keyboard



Auto flight between multiple way-points



Indoor Take-off and land with ultrasonic-sensor

Key challenges faced:

- Mathematical calculations & selecting parts for drone.
- Interfacing GPS sensor with drone.
- Interfacing Raspberry Pi with the APM 2.6
- Autonomous flight testing.

Future Plans:

- Interfacing camera and gimbal system.
- Object tracking drone.
- Obstacle avoidance.
- Get GPS data via WiFi and map places.

Application fields include security surveillance, perimeter defence, mapping hard to reach sites, aerial photography, forest surveys, just to name a few!!