Project Funding – Application

1. Name of the Students :

Sinchana S R   1MS17EC106
Soma Rohith   1MS17EC109
Sushmith T   1MS17EC119
Chiranthan K   1MS17EC135

2. Name of the Guide :

Dr. Raghuram S

3. Title of the Project :

Drone Detection Using Deep Learning

4. Abstract of the Project :

Surveillance of the skies is an important aspect of every sensitive organization that requires significant concealing of its work. It is also very essential for any part of society to prevent the denial of privacy through the usage of drones or other aerial vehicles. This uncompromisable requirement motivated the idea of developing a portable drone detection system for various societal applications. The project intends to design and build a prototype that is capable of notifying the user, of the presence of a drone in real-time surroundings. This is achieved by monitoring the surroundings through a videocam real-time recording and video processing. The drone detection algorithm developed as part of the project is embedded into the software of the device, that would follow the video processing stage and determines the presence of a drone in the footage. The prototype is designed for small-scale standards and can be upgraded to fit every other size of operations. This project demonstrates the potential of such an idea with minimal cost and higher ease of operation. The benefits of such a product include the portability of the device, easy installation and maintenance, affordable price, and reliable aerial security for any organization or home.

5. Estimate of Equipment/Chemicals for the Project along with the Proof for Price Listing :

- Raspberry pi 3 B+ : **₹ 2,999.00** (inc GST)
  (https://robu.in/product/raspberry-pi-3-model-b-bcm2837b0-soc-iot-poe-enabled/)
- HDMI to HDMI Cable : **₹ 150.00** (inc GST)
  (https://robu.in/product/hdmi-to-hdmi-cable-1-8-meter-round-high-quality-copper-clad-steel-black/)
- Official Raspberry Pi 3 Case of Raspberry Pi 3 Model B and B+ (Red-White): **₹ 249.00** (inc GST)
- 32GB Card : **₹ 439.00** (inc GST)
  (https://robu.in/product/sandisk-micro-sd-sdhc-32gb-class-10-memory-card-with-adapter/)
- Raspberry pi Camera : **₹ 1,099.00** (inc GST)
  (https://robu.in/product/5mp-ov5647-sensor-adjustable-wide-angle-fish-eye-lens-night-vision-camera-for-raspberry-pi-3-b/)

- TowerPro SG90 Continuous Rotation 360 Degree Servo Motor : **₹ 195.00** (inc GST) (https://robu.in/product/towerpro-sg90-continuous-rotation-360-degree-servo-motor/)
- Miscellaneous (flexible stand) : approx **₹ 869.00**

Total : **₹ 6,000.00** (inc GST)

6. Declaration from the Students regarding other Funding available/applied for :

None

7. Recommendations of the Project Coordinator of the department :

8. Recommendations of the HoD :

9. Recommendations of the Project Evolution Committee of MSRITAA :