

## **Abstract**

An intelligent video surveillance system using Unmanned Aerial vehicle (UAVs) is proposed to detect the intruder and to provide real time continuous monitoring of the wall boundaries. The high resolutions acquire video frames and relay it further to raspberry pie 3 (processor) where these frames are pre-processed using Gaussian filters. The edges can be identified using canny-edge detection routine. This helps in identifying the intruder intelligently using deep learning classifiers. After face extraction alarm buzzer would be activated to ensure security intact. Interfacing of the drone to android system and processing in terms of time and space complexity was computed and experimentally verified for its real time implications. Furthermore real time testing was done to confirm the desired radio frequency (RF)/microwave characteristics. Wireless routing schemes has been used, Wi-Fi outer is connected for the communication of raspberry pie 3 to the mobile or laptop.