

**AUTONOMOUS QUADCOPTER AND IT'S APPLICATION
DEALING WITH SURVEILLANCE FOR SECURITY**



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We certify that the research work presented in this thesis is to be best of our knowledge all sources used and any help received in the preparation of this study have been acknowledged. We hereby declare that we have not submitted this material, either in whole or in part, for any other degree of this or any other institution.

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Abstract

A quadcopter has four rotors. The rotors are coordinated upwards and are set in a square configuration with equivalent separation from the focal point of mass of the quadcopter. The quadcopter is controlled by altering the precise speeds of the rotors which are spun by electric engines. It is a run of the mill outline for little UAV (unmanned ethereal vehicles) in view of the basic structure. Quadcopters can be utilized for reconnaissance, pursuit and safeguard, development assessments and in a few different fields. The present observation tech accessible to the shopper market is restricted with regards to go. This is mostly because of the way that it is not versatile and is quite recently bound to some settled point. Consequently different units are introduced for making a solitary showing with regards to. Moreover every unit requires singular support. This all beefs up to a great deal of cash being used for a solitary employment. Our drive is to alter a quadcopter into an independent framework equipped for catching food through a moving airborne air ship. The quadcopter will be equipped for self-managed flight by means of remote correspondences while using a microcontroller (Arduino Uno). The objective of our venture was to plan a self-sufficient quad-rotor that is fit for adjusting itself and flying from home (cause) to any set point utilizing preset directions. The quadcopter now has a flight controller being controlled by an Arduino and ultrasonic sensors to distinguish obstructions.

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