

## **ABSTRACT**

*At this time the development of autonomous systems is used in system type rotary-wing vehicle. One of it's kind developed recently is quadcopter. Quadcopter is a flying vehicle with four motorcycles that is one of member of UAV (Unmanned Aerial Vehicle) or drones. Drones can be implemented for aerial photography, aerial mapping, carrying a payload and monitoring. However, there are disadvantages for aerial photography. They are a quadcopter still controlled manually by a pilot that using remote controll and also have difficulty to take a picture or video for moving objects.*

*Therefore, we invented autonomous quadcopter has abilities to follow me that integrated to android. So, the quadcopter can be controlled automatically using android application as a user interface that using a wireless module 3DR with frequency 433 MHz for it's communication, without using the remote control and can following a moving object by tracking the GPS (Global Positioning System) od Android device.*

*The results of this final assignment is motion control system of a quadcopter that integrated in the mobile monitoring system to facilitate the users for take a picture or video on a moving object use a smartphone automatically based on Android.*

*Keywords : autonomous, quadcopter, drones, follow me, GPS, Android*