

## ABSTRACT

In this modern era where the remote is not foreign thing, even a lot of the tools that use these technologies eg. air conditioning, TV remote, etc.. With this remote human existence seemed to be facilitated in doing daily activities. Remote technology is also used in the UAV (Unmanned Aerial Vehicle) world to control the aero robot. Due to the very limited human vision, they need GUI (Graphical User Interface) for the Ground Station that can control aero robot automatically via the computer.

To make the GUI application software requires Microsoft Visual C # and Microsoft Visual C + +. Assisted with 3DR radio as wireless communication, the GUI will send the coordinate points to aero robot that can be able to fly according to the coordinate points that have been determined. Coupled with a fire detection system through image processing, the aero robot could detect fire when fly following the specified coordinates.

With GUI made for auto pilot control system and fire fetection in the aero robotics can be used to control the aero robot without remote and can detect fire to tackling fires early.

*Keywords: GUI, auto pilot, fire detection*