

ABSTRACT

Mobile robots are the most popular types of robots in the world of robotics research. In terms of benefits, research on various types of mobile robot is expected to assist humans in automation in the transportation, safety, production and to measure the weather. Currently, many technologies developed for mobile robot that moves on land and in water, but for a mobile robot in the air is still very little technology developed by natural factors like unexpected rain and strong winds.

For the time being in Indonesia, a mobile robot in the air is still focused on the measurement of weather only. When making measurements of atmospheric robot disorder often strong winds causing wind robots. In this final project will be navigation system on mobile robot is given a parachute that can be controlled so that it can towards the direction which is determined after the robot flown.

This tool is made by combining 2 pieces of technology that is currently widely used, the microcontroller as data processing and radio frequency as a medium for data transmission between the microcontroller. Compass sensor measurement data is sent to the ground segment and from these data, the operator on the ground segment the instructions on the robot to move toward the specified point. From this final project found that the result of a parachute load that can be moved toward a certain direction when dropped from a certain height.