**ABSTRACT** 

Multi robot is a cooperative robot which used to do the same work by

sharing the data through communication media such as wired or wireless. In this

Final Project, the writter will discuss about wireless communication system

between two line follower robots.

Some kinds of wireless module are Infra Red, Bluetooth, WiFi, dan RF.

APC220, one of Radio Frequency Module, will be used in this project. This RF

module has range around 200-400m. The robots will be integrated with Arduino as

the processor and fulfilled with line sensor and ultrasonic sensor as the sensing tool.

In this Final Project, simplex communication will be used as the

communication system. The parameters that will be analysed and tested are the

influence of speed, range, and the proses of one loop program to the communication

system. After had done some testing and analysing on those parameters, it results a

communication between two line follower robots in order to determine the position

and obstacle avoidane method.

Keywords: line follower, simplex communication, PID, RD Module

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