

## **ABSTRACT**

In the Indonesian Robot Contest (KRI) 2011 has been contested a robot that do a task in accordance with a predetermined theme, one robot must move an object to a place or destination. Manual robot moves according to the command of the human (operator) to carry out their duties. At this time to control a robot is using a cable and it's less efficient in its use. Operators using a long cable so that it can interfere with the motion of KRI robot and the operator itself.

To refine the robot deficiency on the KRI, then the final task will be carried out the design and implementation of a prototype robot that can be controlled by Android devices wirelessly. The design of this robot using Arduino minimum system Android Development Kit (ADK), the method used for communication between Android is Ad-hoc Wireless.

Based on the analysis and testing, the system can be implemented into a larger robot and applied to the Indonesian Robot Contest. Referring to the Indonesian Robot Contest (KRI) rules, the maximum size of the playing field does not exceed 15m x 15m. While in this final project, testing the communication distance Wi-Fi at a distance of  $\pm 30$  meters is run properly

Keyword: Control, *Ad-Hoc wireless*, KRI, Android, Arduino ADK.