

## **ABSTRACT**

*In this modern era, the development of technology already move forward in every system application, even in macro or micro system. Controlling system in long distance(remote control) now being developed and becoming attraction of college student to work on their final project. The purpose of advanced technology are to make people life more easier and can make their time more useful.*

*In this final project ,will discussed about design and implementation automatic gate with Android as an interface and Arduino as microcontroller. This research using Arduino Uno as microcontroller, Wifly Shield as connector between Arduino Uno and Android, and Android as Interface system, referring to problem that come in everyday, while car driver must be get off from the car to open the gate when the traffic density is very high. This application good if applied at house which stand on the edge of high density traffic. This automatic gate moved by dc motor with huge torque based on how heavy the gate which made by iron or steel.*

*Last result that can get at this final project is The Automatic gate using DC motor with Android as an interface and Arduino Uno as microcontroller with Wifi as an connection, something that need to remember is this work implemented at the real gate not a prototype. With torque dc motor analysis and size of gear that required if this product going to the market, so that this product can be really reliable, high quality and low cost.*

*Key Words: Arduino Uno, DC motor Torque, Android, Wifly Shield*