

## ABSTRACT

Cell phones or mobile phones only be used in the telecommunication media. Current hardware is embedded in mobile phones, especially with the Android operating system is very diverse. Processor specifications that qualified were planted to support the performance of sensors embedded in mobile phones with the Android operating system. In terms of software (Operating System), a lot of Source Code is provided free of charge, to developed the applications for the Developer. This is exactly encourage the use of a mobile phone based on Android OS as the brain processing information on a mobile robot control by utilizing a variety of existing sensors.

Information processing such as voice recognition which requires a fairly large database can be backed up with the role of mobile phones based on Android OS. Various sensors are located on Android Mobile can be used on a robot. The role of voice recognition sensor on a mobile robot can be replaced by the Android mobile OS.

On this project, obtained a mobile robot that is connected to a mobile phone using Bluetooth module with the Android operating system and Java-based applications as the user interface. Mobile robot can be moved by using human voice that processed on the mobile phone with Android operating system and the summary of all project testing have 20,5%.error rate.

**Keywords:** *Mobile Robot, Android OS, Microcontroller, Handphone*