

## **ABSTRACT**

*Today man can not be separated from the electronic devices to support their activities. Some electronic devices that support human activity is a mobile phone and a camera. Has now created a cell phone has many advanced features in it so it can be used not only for communication only. The mobile phone is called a smartphone. Many people use their camera while traveling to capture various moments. However, many a traveler who is traveling alone and had trouble when trying to photograph himself because no one else in the vicinity. However, if absolutely alone, it would be difficult to do so. To overcome this, people usually use a tripod so that he could shoot himself. However, the person will often go back and forth to set the appropriate camera features. For that, we need a system that is able to set the camera features from a distance without touching the camera.*

*In this final project, the android system smartphone that is capable of controlling features in camera and tripod movement wirelessly will be made . An Android smartphone will establish communication with RN-42 bluetooth which attached to camera and HC-05 to tripod. HC-05 Bluetooth Module will communicate with arduino to control DC gear motor so the tripod will move according to motor movement. Afterward, android will perform communication with RN-42 module which is connected with camera to send commands to change various features. After the position is correctly set, Bluetooth module and smartphone will able to do direct communication with RN-42 bluetooth and hence the information will be processed in microcontroller so the given command will be executed by the camera.*

*From the performed research, maximum distance value of bluetooth from Android smartphone with RN-42 bluetooth is known to be 49 meter in indoor environment and 26 meter in outdoor environment. For HC-05 bluetooth module, the obtained maximum distance result which Bluetooth from Android smartphone and that module is separated is 25 meter in indoor environment and 15 meter in outdoor environment.*

*Keywords: Smartphone, Android, DSLR Camera, Tripod, Bluetooth*