ABSTRACT

Human follower is one procedure that supports the development of mobile robots to interact with humans. Research that are hot at the moment is the selection of methods to detect and follow a human in mobile.

In this final project created a robot-based Raspberry Pi is capable of detecting the presence of humans when humans entered the catchment area who were then able to follow the man where he had gone. This robot has a sensor CMOS Camera as a human being and movement's sensor with the image processing is done using Support Vector Machine.

With the ability to follow a human robot, then this robot can be developed in the future and can be applied as an assistant guide, overseer, or as a helper in performing certain activities required to accompany a person in performing activities. Expected robot can detect and follow a human being when the man entered the detection area is an open area with good light intensity within a limited time.

Keywords: *Support Vector Machine, ImageProcessing, Raspberry Pi, CMOS Camera.*