

ABSTRACT

Object Recognition is one of the important developments in AI technology and is very useful for everyday life. Can be used as a security and crime investigation tool, as well as a system in autonomous robots. Examples include its use in garbage sorting robots, China's mask surveillance cameras, and Tesla's self-driving car that uses Object Recognition to recognize red lights, road obstructions and pedestrians. Object recognition requires a camera that can capture images that will be processed by the algorithm. Due to the relatively low cost and the ability to transmit data using a LAN (Local Area Network), the ESP32 camera module was chosen as a potential candidate for Object Recognition activities. The ESP32 is a series of low-cost, low-power camera module systems integrated with a dual-model microcontroller, Wi-Fi (wireless fidelity) and Bluetooth in one board. The ESP32 module used in this activity uses an OV-2460 camera.

Keywords: *Module, ESP32, Object recognition, camera.*