ABSTRACT

As an effort to deal with COVID-19, the government has implemented a policy of Pemberlakuan Pembatasan Kegiatan Masyarakat (PPKM). It was conveyed in the Regulation of the Minister of Transportation of the Republic of Indonesia Number PM 15 of 2019 that intercity transportation must pick up and drop off passengers at the terminal. To ensure that the passenger capacity on the bus is in accordance with the provisions of the PPKM policy that is being implemented. And to ensure bus drivers pick up and drop off passengers at the terminal according to the Regulation of the Minister of Transportation of the Republic of Indonesia Number PM 15 of 2019. A passenger counter system on the bus is needed. In previous studies, a passenger or human counting system has been designed. Various methods and hardware are used, including infrared sensors, webcams and pressure pads. In this final project, a passenger counter system on the bus is designed using a camera and a Raspberry Pi. This system is designed to be able to take pictures of all passengers on the bus and then count the passengers in the picture. This system is tested by implementing on the bus and then the bus is run. As well as processing images from the TransTRACK.ID client bus. The highest average accuracy of passenger counting from the tests carried out was 91.02% while the lowest average accuracy was 0.56%.

Keywords: Image Processing, Passenger Counter, Raspberry Pi, Camera