ABSTRACT

Technology has been widely used in daily life that may not even it's presence is felt people. One of it is the use of CCTV which can serve as a monitoring devices. But besides it's main function, CCTV as an extended part of eyes can be used to perform people countinh.

The author in this Final Project discusses about counting people with specific case studies, that is counting people in a classroom. The benefits that can be taken in making estimates of the number of people in a class, among others, is to be able to check whether the presence form is in accordance with the number of people in the class. Counting people is done using background substraction background with Gaussian Mixture Model (GMM) method to perform the extraction of the object to be observed, in this case is the people and the background. Furthermore, the classification process is done through the Human Presence Map to focus detection pixels where people is located so that we can count people based on a region of predetermined area. With the method proposed, people counting could reach an accuracy of 91% for case of 1 person detection in test video with separate sitting.

Keywords: *people counting, classrooms, Gaussian mixture models, human presence map, pixel*