ABSTRACT

Sports broadcast videos can be used to analyze the tactics of opposing players by coaches and players. However, due to the long duration of the game in a sport, video viewers do not get complete information directly but must observe the whole series of videos. Although basically observing can be done directly, it will be more effective if it is carried out with rebroadcasts which are analyzed to become statistical data. Therefore, we need a system that can play a role in carrying out the overall analysis, by utilizing the HSV color filtering method to identify. In the end, technology that is increasingly developing makes humans more helpful in carrying out life. Image processing that has been widely used in the sports field to track objects on the field such as players, balls, or field lines. Therefore, we need a system that can track and identify jerseys by utilizing opencv and with the HSV color filtering method to make it easier to analyze soccer game statistics. In this final project, an average accuracy value of 89.1% was produced by testing 10 detection and identification video samples and yielding an accuracy value of 100% on testing from 1 detection, identification, and calculation video sample.

Keywords: Object Detection, Coloring Filter HSV, OpenCV, Yolo, Deep Learning