ABSTRACT

Moving object tracking system is a system used to perform tracking of an object, so that the movement of an object can be detected by taking into account the changes that occur around the object. In use, the system of tracking moving objects are often used in the field of robotics, game, as well as the security of the building. Various methods are developed in this matter.

In the process this time tracking of moving objects, the method used is the Scale invariant feature transform (SIFT) and continuously adaptive mean-shift (Camshift). The third method can be used in tracking moving objects. Where in detecting and describing local features of images in the video data obtained by a Scale invariant feature transform (SIFT) keypoint matches and eventually traced the movement so that the resulting output video tracking of moving objects. Not only that method, the method can be used also Camshift in tracking moving objects. Given Camshift method has the ability to adapt to the probability distribution of the ever-changing colors change every frame of video.
From the testing that has been done, the software tracking moving objects using the Scale invariant feature transform (SIFT) and continuously adaptive mean-shift (Camshift) has advantages and disadvantages of each. The data used in the trial of this software is non real-time.

**Keyword:** Moving object tracking system, scale invariant feature transform, camshift.