ABSTRACT

Security is one of a thing that really matter to everyone in everyplace. In this modern time, security system is created with high-end technologies and more secure system. One of many security system that have been most used by now is CCTV Camera. And for addition to the camera, many people enchance the CCTV with IT systems. We can called it Motion Detection system, Object Tracking system, and many more. The detection system will use many parameters to do it's job that will help the camera to detect an object that moving or not.

In this research, system designed for detecting the position changes of an object. The algorithm that will be used in this research basically is a fusion of two algorithms, snake (active contour) and mean-shift. These algorithms have a good performance in motion detection. Snake is one of a kind for that matter, but it can't ensure the object is the same as previous frame or not. And mean-shift can help snake for knowing the detected object.

And the result of this research, the system give a nice performance with 30 FPS for frame rate, so the image processing process are done well. So we can say, this new algorithm are good enough for detecting static object.

Keywords: Detection, Object, Security System, Snake, Mean-Shift , Tracking.