

## **Abstract**

Operation of the rifle is on top of tanks or armored combat is still driven manually by a soldier . The author of TA tried to find a solution to replace the role of soldiers directly in the gun operates.

By using the camera sensor to capture images in place of a soldier's eyes, which is then processed by using image processing and motion tracking application to obtain a target coordinates which then results of these coordinates are used as a control to move the equipment in the fire hit the target automatically

Motion tracking using Lucas Kanade method will produce the output coordinates of the object as a target that will be used to calculate the distance between the center of the target range. Where is the center point shot at the middle of the screen

The output from the motion tracking used to be a control, where the control will move the fire simulation tool to find and lock the target into the center of the gun.

The results showed that the implementation of the motion tracking with Lucas Kanade method on simulated firing devices successfully.

**Keywords:** Motion Tracking, Lucas Kanade, fire smulation, object