ABSTRACT

Touchscreen projector is technology that can change surface of the wall to become touchscreen. It can use in any platform like Windows, Android, or Mac. The way it's use by using tools like pen, or with gesture of finger. There is so many method that have been research like Hand Tracking and Segmentation (HTS) Algorithm, Hand Segmentation Using Lab Color Space (HSL), and Hand Segmentation Using HSV color Space and Sample Storage Approach, with that three method compared and the result is Hand Tracking Segmentation become the best option from other method, but there is some disadvantage in detecting skin color with background color, if skin color have same color with the background then this method doesn't fully functional. With depth senor in Kinect, to detect contour of hand and tracking with high accuration. Even tough if tracking getting high accuration, it is still doesn't get optimum performance to move cursor using hand movement. With that background problem, research about "Optimalization of Interactive Projector Mouse Movement with Hand movement using Depth Sensor and Skeleton Algorithm" expected to be solution and fill the gap in previous research.

Key: *interactive projector, Kinect depth sensor, Hand Gesture, Air Writing*