# KAJIAN TENTANG APLIKASI *AUGMENTED REALITY* DENGAN DETEKSI TELAPAK TANGAN

**Jun Can** [1] **Agus Budi Dharmawan** [2] **Lina** [3]

[1] Teknik Informatika, Universitas Tarumanagara
Kampus 1 Gedung R Lantai 11
Jl. Let. Jend. S. Parman No. 1 Grogol Jakarta Barat 11440
email : 535110073@fti.untar.ac.id [1] agusd@fti.untar.ac.id [2] Lina@untar.ac.id [3]

## ABSTRACT

*In this application, performed in real time by using a camera to detect hand so it can are added a 3-dimensional object. Stages in this application is the first to capture the image of hand on the camera and then converted into YCbCr image to facilitate detection of hand. Then the image of YCbCr classified in the form of hand and not a hand with a change to binary image according to the range of values Cb and Cr. After that, the image thinning using the method thinning zhang zuen. Image thinning, will recognize hand area by looking for the top, left, right and bottom hand detected. After that, will be calculated translational hand detected from a central point and determine the rotation, so that the object can be added above hand. Based on the test results can be detected with a good hand if a bright light on hand and object are added doesn't match the rotation of hand because it can't recognize the fingers.*

## Key words

*Augmented Reality, Hand Detection, YCbCr, Binary Image, Thinning Zhang Zuen.*