

Along with the development of technology, Augmented Reality (AR) has been developing from desktop to mobile and the use of marker which is not using black and white square picture anymore. Applying a smaller ground and having a slower computation speed than desktop are giving an influence to the tracking process and interactions in AR mobile system. One of the tracking method that the image uses as marker is natural feature tracking, this method is being used to detect image faster than the other method. Occlusion based is an interesting interaction method with a low computation.

In this final project, image tracking and occlusion based method were implemented to gain optimal result from AR mobile using multi-object and multi-marker..AR library which is used in this final project is Vuforia, because Vuforia can produce multi-object and multi-marker AR mobile system. Image tracking is used for placing 3D objects such as the animals in Indonesian islands.. occlusion method used to analyze object's appearance for user's point of view.

Image tracking and Occlusion method can be used in Indonesian animal application very well, with a consideration for its marker size, 10x15 cm, marker distance with the camera 15 cm, and the marker closing intensity tolerance which is reaching 10%.

Key Words : Augmented reality (AR), AR mobile, Vuforia, image tracking , occlusion based

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