ABSTRACT

SOLAR SYSTEM BASED RECOGNITION

USING AUGMENTED REALITY HOUGH TRANSFORM

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Augmented Reality (AR), is a technology that combines two-dimensional virtual objects and three-dimensional into a real three-dimensional environment plainly projecting the virtual objects in real time. This research will include AR technology into an introduction magicbook solar system. Introduction of AR-based solar system requires a video stream taken from the camera as a source of input, then this application will track and detect the marker (marker) by using the tracking system, after the marker is detected, the 3D model of the solar system was drawn on the marker as if the real model . To create a model solar system, the model must be made in advance by using software to create 3D objects, in this case using 3D MAX 9 then be formatted into a format supported by this application. In the process of changing the format this happens, several kinds of problems that led to models that appear different from the original model or even the failure is shown. Tests carried out using two Micro Pack 5 MP webcam, using 11 types of markers. From the test results, this application work well when a resolution of 640x480 with a distance of 25 cm. That is the standard resolution, each has a standard webcam resolution is different.