## ABSTRACT

Kindergarten education is an education specifically for children aged four to six years. Currently, kindergarten introduces geometry to students using only books and props such as blocks and magnets or toys in the form of geometry. The purpose of this application is to create new and interesting learning methods, also easy to understand by kindergarten students, parents /guardians and teachers. This geomtery recognition application uses Augmented Reality technology applied to Android smartphones. With this application, kindergarten students can play while learning in different ways and not easily bored. The software used is Unity to create AR, and Photoshop to create marker cards. The method used to build this application is the Waterfall method. The application can display seven space builds that can be replaced with seven colors, if successfully scanned the application will bring up a three-dimensional animated geometry. Based on the research that has been done, it was concluded that this application gets a percentage of 86.75%, so that it falls into the category of very worthy to be used to support the learning of geometry in kindergarten students.

Keywords: Augmented Reality, Geometry, and Early Childhood Education.