# **ABSTRACT**

Kelvin Komala / 55150414/ 2019 / The Implementation of Augmented Reality Technology in the Visualization of Fauna World Introduction for the Marker-Based Early Childhood Education / Advisor: Yunus Fadhillah S, S.kom, M.kom.

 The process of learning and introducing the world of fauna in the early childhood is often done by using teaching aids such as puppets or pictures which are considered as conventional methods that require a lot of time and energy.

By introducing the animals to children it can stimulate the brain's imagination and creativity. In the development of information and technology, we could now use devices like computers, laptops or smartphones as aids in the learning process. The implementation of Augmented Reality technology on smartphones will make it easier for young children to get to know several types of animals. The purpose of this final project is to create an Animal Recognition application using Marker-based Augmented Reality technology in android smartphones.

The method applied in making this Animal Recognition application is interview and direct observation. The Augmented Reality application is designed by using Unity software with marker settings. The application features several types of animals displayed in 3D using Augmented Reality technology.

Animal recognition through this Augmented Reality technology application uses markers. Each marker consists of one 3-dimensional (3D) object and contains 4 animal classifications namely mammals, reptiles, aves, and pisces.

With the presence of the Augmented Reality application, it is expected that the introduction to animals in early childhood will be easier because it is connected to the real world so that students can better understand and learn about the types of animals provided by the teaching staff.

Keywords: *Augmented Reality,* android, marker, 3D, and unity