

## ABSTRACT

*The WeARInterior application is a room measurement application and places 3D furniture objects based on Augmented Reality as a tool for the interior design process. This application aims to help the public to be able to simulate room ideas and arrange the rooms that people want before buying furniture first using the WeARInterior application.*

*This application system can be used using an android smartphone that supports ARCore. ARCore is Google's platform for building Augmented Reality experiences. ARCore allows the phone to understand the surrounding area. Several APIs are available on Android and iOS to enable AR experiences. ARCore does two things: it tracks the position of a mobile device as it moves, and builds its own understanding of the real world. ARCore's motion tracking technology uses the phone's camera feature to identify sensors or coordinate points. The system design will be built on the WeARInterior application in which the user can select several menus, placement & 3D modify menus, measurement menus, and info menus. In the placement & 3D modify menu, users can try to place 3D furniture objects. In the measurement menu, the user can measure the room. Meanwhile, if the user selects the info menu, the application will display OurTeam which contains the application developer profile and a Guide which contains an explanation of each feature in the WeARInterior application. The WeARInterior application is a room measurement application and places 3D furniture objects based on Augmented Reality as a tool for the interior design process. This application aims to help the public to be able to simulate room ideas and arrange the rooms that people want before buying furniture first using the WeARInterior application.*

**Keywords:** Augmented Reality, ARCore, Interior Design , Object 3D