ABSTRACT

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APPLICATION OF AUGMENTED REALITY FOR
iOS BASED APP “ARFurniture”

(xv + 84 pages, 33 figures, 6 tables, 2 appendices)

Augmented reality is a technology that is quite immature in its development. Most people are more aware of virtual reality, its brother. But nowadays augmented reality has gained more attention to the developer than virtual reality. Augmented reality is a technology that will change the way people access information. This study put itself in the subject of interior design as a field of augmented reality technology implementation. iOS is used as the environment where “ARFurniture” runs.

One of the difficulties in product design is to introduce products to customer. To introduce products that has not or has been made, the designer need to present a sample product in exact detail of specification. They cannot just rely on two-dimensional image for people to imagine. Therefore, the idea of representing a real-time three dimensional product emerged.

“ARFurniture” application is a combination of two leading technologies that is augmented reality and iOS. The development starts with system analysis and design, followed by graphic design, animation, and programming. Finally the implementation of the whole design together with software testing to show that the application works as expected. The application itself is simple by having a UIView that calls camera function from the device. Software testing is conducted from component testing, integrated testing, regression testing, system testing, alpha testing, and beta testing. The result is the application works well with iOS environment in collaboration with ARToolkit for iOS to produce a helpful app dedicated to interior design industry.