

## **ABSTRACT**

*The world has now entered the fourth industrial revolution, which is already focused on digital technologies. In the use of technology, of course there are many positive impacts for society in various ways. One of them is in the health sector, where many developers innovate to utilize technology as a service facility for patients. Based on WHO data in 2002, more than 5.47 million people died from stroke in the world. The researchers designed and developed the Hungry Rabbit game based on Mixed Reality as a therapeutic tool that focuses on the hand movements of post-stroke patients and is expected to be an efficient therapeutic tool. The development of a Mixed Reality-based application that uses a marker-based tracking method for Range of Motion exercises for the upper extremities in post-stroke patients has shown practicality when performing therapy before and after using the application. So that it can be said that exercise using Mixed Reality-based applications has an influence in increasing the range of motion of post-stroke patients.*

*Keyword : Stroke, Augmented Reality, Mixed Reality, Virtual Reality, Therapy*