

## ABSTRACT

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*Suture which were was studied in medical science is sewing techniques to align the two edges of the wound. Based on the state of the patient's wound, There are several techniques for performing suture. All the techniques that have been taught especially suture horizontal mattres technique and vertical mattres technique, there are still some medical students who are less and do not understand the technique of suture. Because of these problems, then simulation that focuses on horizontal and vertical mattres technique was made in this research. Simulations performed using laptop and Leap Motion with the flow presented in the form of simulation suture. This simulation was made base on Windows and detects hand gesture as the navigation with Leap Motion. In this simulation there are two options, namely horizonta and vertical mattres. User can view each phase to properly perform suture which was shown by animation. This simulation is designed to help medical students understanding the material horizontal and vertical mattres technique. This research is producing a simulation with user acceptance as 70%.*

*Keywords: suture simulation, horizontal mattres, vertical mattres*