

## **Abstract**

The technology is getting advanced biomechanics. Various human activities have used the services of biomechanical technology. From the medical field to use in the field of industry. However, in the development of this technology, there is very little innovation that is used. To overcome this problem needs to be made of the innovations is an intelligent system that is relatively easy.

Innovation that can be used to overcome this is to use speech recognition to operate technology biomechanics . This innovation is expected to be one of the solutions to develop the operation of biomechanical technology.

Targeted output of this research is a robot finger can interact through oral communication of the users who use the phrase in English . The scope of the functions are controlled robot move the robot in the form of a finger . In testing the robot is able to understand the words of the users with an average accuracy of 79 % on the room noise -free sound.

*Keywords: Biomechanics, Innovation, Speech Recognition, HMM, Finger Robot*