

## ABSTRACT

Indonesia is a large country with many cultural diversities and Indonesian tribes have many languages or dialects that are different from other regions. It is very important to communicate and delivered in different languages. Speech recognition has many methods as learning, one of them using Deep Learning.

By using Deep Learning that focuses on finding representation of multilevel features which at the higher feature level represent more abstract aspects of data .. The advantages of Deep Learning for speech recognition, better network architecture, can optimize many parameters. Therefore in this study the authors will implement Deep Neural Network on Speech Recognition to classify Sundanese language of middle east dialect.

From the results of research conducted, from the parameter values of hiddensize 300, epoch 500, L2WeightRegulation 0.0002 and sparsityRegulation 5 obtained a classification of 100% in the system validation testing. After getting the ideal parameter, it is done classification one sentence from sentence one to sentence six. From the tests with these tests, it can be concluded that, although the difference in words is the same, it means that it can reduce the level of accuracy and with the same words, but different dialects can also reduce the level of accuracy in the system.

**Keyword:** Deep learning, Speech Recognition, Deep Neural Network