ABSTRACT

Indonesia is a country with a variety of tribes and languages, in one tribe, many use different dialects or languages. In this case the author makes a Speech Processing application system with Speach Recognition technology using the method or algorithm used, namely the Recurrent Neurel Network (RNN) for the determination of the Malang, Jember, Solo, and Banyumas dialects. At this time there are a lot of researches and experiments that have been done by modern technology experts using Speech Recognition, for example, Google's Google voice and Iphone's Siri, where processing input data in the form of sound becomes output that is in accordance with what the application user wants. Similar to the application system for determining the dialects of Javanese Malang, Jember, Solo, and Banyumas using the Recurrent Neurel Network method can determine and recognize not only one Javanese dialect but four Javanese dialects, namely Javanese dialects in Malang, Java Jember, Java Solo and Java Banyumas.

Recurrent Neural Network itself is a method used in processing data on this system, which can achieve the highest accuracy of 64% in matching between input and output produced. The system created has the same basis as google voice, or google translate, but in google voice features can only be in certain languages such as Indonesia, English, and Java. In this application system the input in the form of a Javanese dialect language sound will be processed until it can be output can determine the Java dialects of Malang, Jember, Solo, and Banyumas. Not only recognize one Javanese dialect but also can determine the Javanese dialect of which area is produced.

Keywords: Speech Processing, Speech Recognition, Recurrent Neural Network, dialect