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KUTIBA NANAA

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By

Kutiba Nanaa

KOLEJ SASTERA DAN SAINS
(College of Arts and Sciences)
Universiti Utara Malaysia

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ABSTRACT

Human-being learn their mother tongue instinctively from the childhood, but when they grow up, many challenges will appear when they try to learn other languages. The building of vocabulary bank and understanding of grammar is not an easy job, so some people use computer to help to translate other language to their mother tongue, but this mean also got its limitation and disadvantages such as the misunderstanding of the words. In this study, the researcher will use artificial intelligent technologies to solve these problems. First, speech will be received as sound waves, then it will be segment into letters and recognized by the usage of Neural Network.

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INTRODUCTION

1.1 Introduction

In computer technology, speech, recognition continues to develop for a wide variety of applications from hands-off control of industrial equipment and of computer systems in low light, to input by persons unable to utilize a keyboard or video display terminal (Klatt, 1991). The voice input and recognition has been used in the business, but it is not so widely popularized to the public (Green, 1984).

People are using multiple sources of information, e.g. lip-reading, facial expression, hand gestures and body language, to recognize speech with high accuracy (Wu, 1991). Acoustic speech signals include most of the information needed to understand a communication. Recognition of the speech signal will be inaccurate when noise in the environment is very strong.

A speech recognition system based on synthetic generation of reference prototypes is described. The vocabulary and grammar are described in a finite-state phoneme network. In the transformation from symbolic to spectral representation, reduction rules modify the

The contents of the thesis is for internal user only

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