

HUMAN BEHAVIOUR RECOGNITION, IDENTIFICATION, AND COMPUTER INTERACTION

Edited by

Othman Omran Khalifa, B.Sc., M.Sc., Ph.D.,
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Chapter 24

Interactive Voice Response Technology for Telephony System

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24.1. INTRODUCTION

Speech is the primary means of communication between people. For reasons ranging from technological curiosity about the mechanisms for mechanical realization of human speech capabilities, to the desire to automate simple tasks inherently requiring human-machine interactions. There have been many interesting advances and developments since the invention of the first speech recognizer at Bell Labs in the early 1950's. Besides inventing useful automated speech recognizers, scientists and researchers' contributions were to produce efficient algorithms that help to produce better quality automated speech recognition systems, and improve the accuracy and matching standards in order to make the systems more useful.

Hence, this chapter studies Interactive Voice Response Technology in telephony domains under noisy environments through a combination of sufficient algorithms, in order to obtain higher accuracy and recognition rates of the system as shown in Figure 24.1.

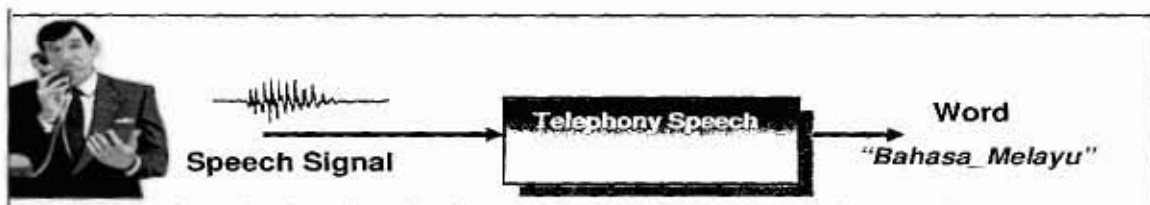


Figure 24.1: Interactive Voice Response of the telephony speech recognition system