

An Anthology of Applied Computer Technologies

Zulkefli Muhammed Yusof
M.M Hafizur Rahman



IIUM PRESS

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

AN ANTHOLOGY OF APPLIED COMPUTER TECHNOLOGIES

Editors

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IIUM Press

Published by:

IIUM Press

International Islamic University Malaysia

First Edition, 2011
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Perpustakaan Negara Malaysia

Cataloguing-in-Publication Data

Zulkefli Muhammed Yusof and M.M. Hafizur Rahman:
An Anthology of Applied Computer Technologies

ISBN: 978-967-418-106-2

Member of Majlis Penerbitan Ilmiah Malaysia – MAPIM
(Malaysian Scholarly Publishing Council)

Printed by :

IIUM PRINTING SDN. BHD.

No. 1, Jalan Industri Batu Caves 1/3

Taman Perindustrian Batu Caves

Batu Caves Centre Point

68100 Batu Caves

Selangor Darul Ehsan

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5. EMOTION SPEECH RECOGNITION USING KDE AND MLP NEURAL NETWORKS

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ABSTRACT

Emotion recognition in speech is important in human-computer interaction. Recently so many applications used the speech recognition such as in automated telephone. Thus, speech is a significant and applicable research topic, and present a research and show results for emotion recognition using kernel density (KDE) as its features extraction and use multilayer perceptron (MLP) in neural network as the classifier for the testing, validation and verification.

5.1 Introduction

Recognition of emotions in speech is a complex task that is furthermore complicated by the fact that there is no unambiguous answer to what the “correct” emotion is for a given speech sample (Scherer, 2003; Batliner et al., 2003). Emotion research can roughly be viewed as going from the analysis of acted speech (Dellaert et al., 1996) to more “real”, e.g. from automated telephone services (Blouin & Maffiolo, 2005). The importance of this speech recognition is to assure the efficient human-computer interaction.

The aim of emotional speech recognition is to identify the emotional or physical state of a human being from his or her voice. The emotional and physical states of a speaker are known as emotional aspects of speech and are included in the so called paralinguistic aspects. Furthermore, although the