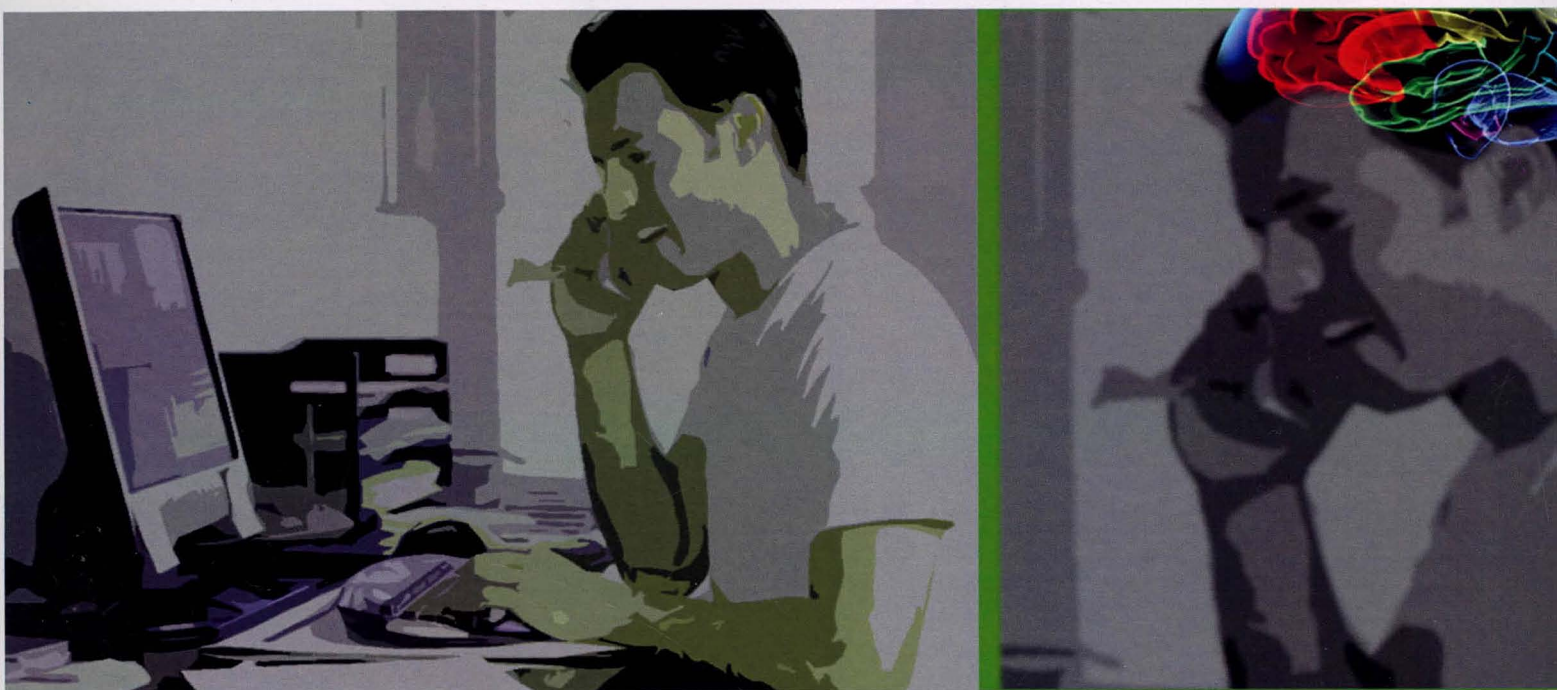


UNDERSTANDING BRAIN DEVELOPMENTAL DISORDER BASED ON EEG IN SOFT COMPUTING APPROACH

Abdul Wahab Abdul Rahman



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INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

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IN SOFT COMPUTING
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Editors

Abdul Wahab Abdul Rahman



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**EMOTION DETECTION FROM BRAIN SIGNALS
BASED ON MUSICAL AND VISUAL STIMULI
MARINI OTHMAN, ABDUL WAHAB ABDUL
RAHMAN AND REZA KHOSROWABADI**

5.0 Abstract

In the past, psychologists have established the link between stress and human emotions. The inability to handle stress might leads towards mental illnesses that affect our thoughts, reason and judgments. Thus the understanding of human emotion is important for stress regulations. In our work, brain signals were collected while subjects were exposed to emotionally related musical and visual stimuli of calm, fear, happy and sad. Twelve cepstral features of the MFCC were extracted from the EEG signals and later classified using MLP. Analysis results showed that it is possible to detect the affective state of the subjects with the accuracy of up to 90%

5.1 Introduction

The study on stress has been a popular topic among psychologists for the past few decades. A review by Cabanac (2002) has described