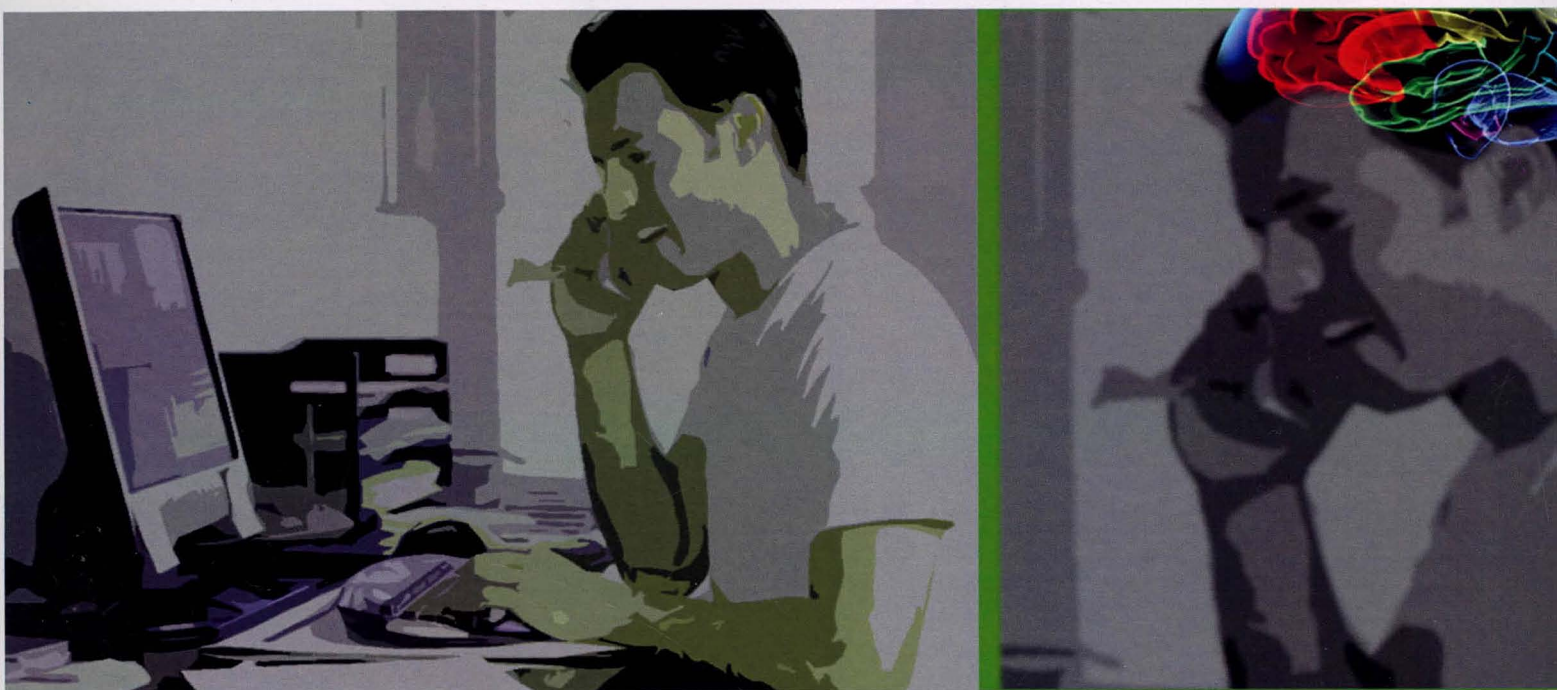


UNDERSTANDING BRAIN DEVELOPMENTAL DISORDER BASED ON EEG IN SOFT COMPUTING APPROACH

Abdul Wahab Abdul Rahman



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INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

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DISORDER BASED ON EEG
IN SOFT COMPUTING
APPROACH**

Editors

Abdul Wahab Abdul Rahman



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**UNDERSTANDING STUDENTS' EMOTION WHILE
SOLVING MATHEMATICAL QUESTIONS USING
EEG SIGNALS**

**NORMAZIAH ABDUL AZIZ, ABDUL WAHAB
ABDUL RAHMAN, MARINI OTHMAN AND
NAJWANI RAZALI**

6.0 Abstract

EEG has been widely used in many areas including the learning field. In school curriculum, mathematical anxiety is considered as a common problem among students. Unregulated emotions may affect students' performance in the classroom. The use of EEG shows potential to detect emotions that are normally experienced among learners while solving mathematical problems. Data will be analyzed by means of pattern recognition and classification techniques, specifically using the Gaussian Mixture Model (GMM) for features extraction and Multilayer Perceptron (MLP) as the classifier. Results representing the dynamics of students' emotions are mapped for