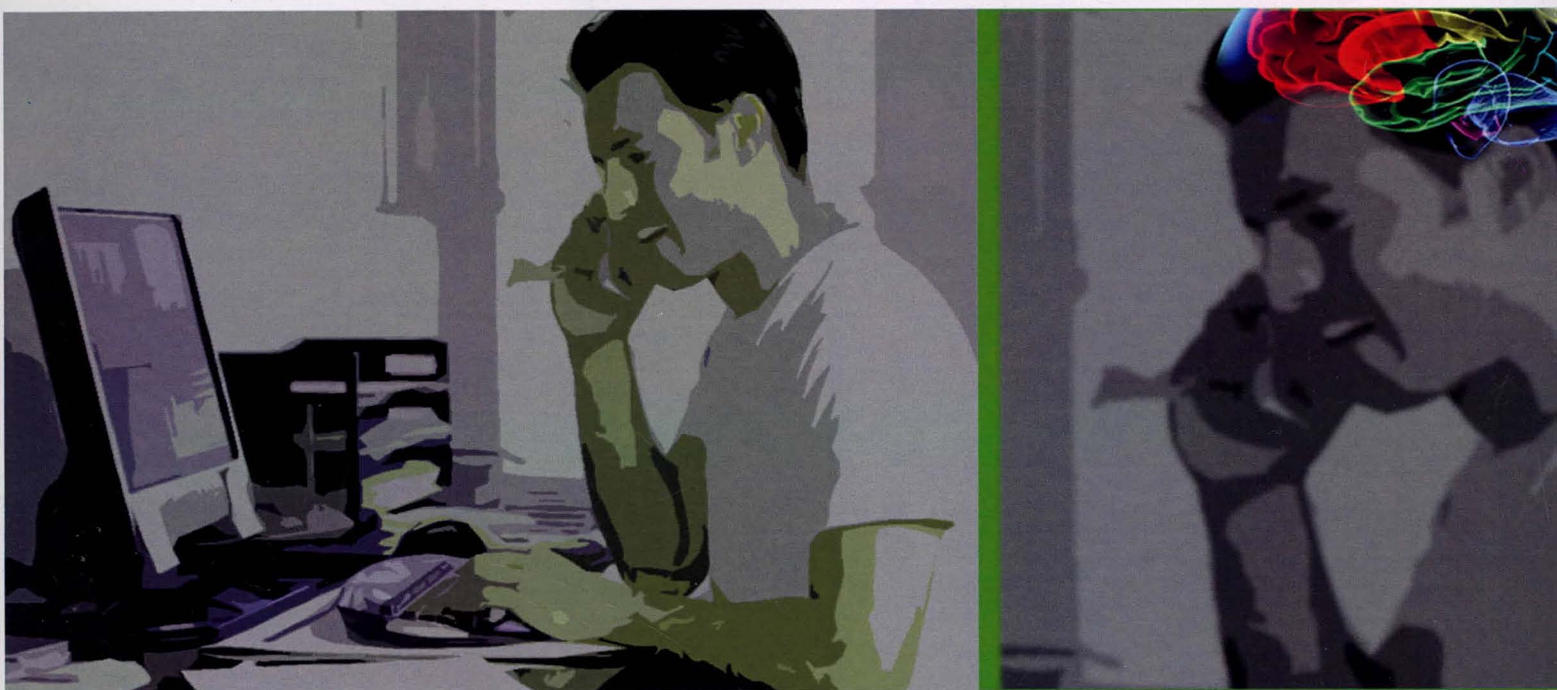


# UNDERSTANDING BRAIN DEVELOPMENTAL DISORDER BASED ON EEG IN SOFT COMPUTING APPROACH

**Abdul Wahab Abdul Rahman**



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INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

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**Editors**

Abdul Wahab Abdul Rahman



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**DETECTION OF AUTISM SPECTRUM DISORDER  
(ASD) BASED ON MOTOR IMITATION  
ABDUL WAHAB ABDUL RAHMAN AND NAJWANI  
RAZALI**

**10.0 Abstract**

Motor imitation became well known as one of the problem in autistic children. It plays an important role in relation to social behavior among autistic children. Thus, this research is focusing on motor imitation in discriminating autistic and control children. Our study has adopted one of the video stimuli for clinching the hand from Brainmarkers. 6 selected autistic children and 6 selected normal children were involved in this study. EEG has been used as mediator in order to do data collection of the brain signals. All data has been analyzed using Gaussian mixture model (GMM) and Multilayer perceptron (MLP) as classifier to discriminate between autistic and normal children. Based on the experimental result, it shows the potential of verifying between autistic and normal children with accuracy of 92%.