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**Investment decisions based on EEG emotion recognition** (Article)
Razi, N.I.M., Othman, M., Yaacob, H. 

Kulliyah of Information and Communication Technology, International Islamic University Malaysia, Jalan Gombak, Kuala Lumpur, Malaysia

## Abstract

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In the recent years, computational neuroscience which is a study on the brain functions was frequently applied to discover interesting patterns in the investment decisions. Emotions in neurofinance study have been measured by sentiments analysis but not measured by biosignal. Behavioural finance affects investors' performance which is also influenced by their emotional or cognitive errors in taking the investment decisions. This paper focused on the EEG-based emotion recognition recorded while making decisions that can also be helpful in investment's returns. The features were extracted by using Mel Frequency Cepstral Coefficient (MFCC) and the classification used the Multi-Layer Perceptron (MLP) classifier. The EEG-based emotion recognition was tested by using the dimensional models of emotions, 12-PAC and rSASM, and also the Radboud Faces Database (RaFD). Results show that investment decisions can be driven by the emotions of the investor and some measurement should be taken before they lose their money. © 2017 American Scientific Publishers All rights reserved.

## Author keywords

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

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- 1 Bikas, E., Jurevi, D., Čienėdubinskas, P., Novičkytė, L. (2013) *Procedia-Soc. Behav. Sci.*, 82, p. 870. Cited 6 times.

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