

## عنوان مقاله:

An Effective Algorithm to Diagnose Bipolar Disorder in Different Neural Networks Structures

## محل انتشار:

کنفرانس بین المللی مهندسی، هنر و محیط زیست (سال: 1393)

تعداد صفحات اصل مقاله: 11

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## خلاصه مقاله:

Along with the rapid development of artificial neural networks in the fields of medical engineering, the modeling, characterization, classification, and diagnostic analysis of psychological disorders have become significant subjects. This paper is proposed and implemented an effective scheme in different neural networks architectures, such as MLP, RBF, and SVM, to determine which neural network architecture is more effective in diagnosis of bipolar disorder. The proposed scheme uses two levels networks models to streamline the diagnostic process bipolar disorder and avoid misdiagnosis. It is based on the reactions of patients and healthy people to 47 related depression parameters such as depressed mood, reduce energy, lack of pleasure, crying, sadness, weight loss, lack of focus, risky driving, high joy, garrulity (speak much), Suicidal thoughts (such as a history of suicide or thinking about it), etc. The experimental results show that the detection errors of bipolar disorder have decreased to 2%, which reveals a high performance in primary diagnosis.

## کلمات کلیدی:

;Bipolar Disorder; MLP; SVM; RBF; Depression Parameters; ANN

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/372326>

