Project Title PP' Web Application Screening for General Risk of Depression

Using Techniques Data Mining

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Abstract

The research aims to develop a system called PP' web application screening for general risk of depression using techniques data mining. The dataset in this research is depression symptoms that is collected 400 records from www.pobpad.com (medical websites). The dataset is taken through the process of preparing data to find models and measure model performance. The model of the highest accuracy and more than 70 percent values is developed as the screening web applications. The results showed that the study compared the process of analyzing depression risk with three data mining techniques: the vector support machine technique provide an accuracy of 72 percent, while the neural network technique provided 70 percent accuracy, and finally, the tree technique decided to give an accuracy value of 62 percent. The results show that the vector machine support technique provides the highest accuracy and has a more accurate and easy-to-understand analytical model than other techniques. The best models are used to develop web applications. The results of the analysis are divided into 4 forms: no risk, less risk, moderate risk, and very risk with basic treatment instructions. The system developed is evaluated through questionnaires divided into two parts: 3 experts and 30 general users. It found that the expert estimates were an average of 4.23, the satisfaction level was very high, and the standard deviation was 0.57, the standard deviation level is quite different. The average estimate from the average user is 4.48, the satisfaction level is very high, and the standard deviation is 0.61, the standard deviation level is quite different. Developed systems can be implemented effectively.

Keyword Depression, Classification, Support Vector Mash Techniques, Neural Network Techniques, Decision Tree Techniques