

## عنوان مقاله:

A new method to detect deception in electronic banking using the algorithm bagging and behavior patterns abnormal users

## محل انتشار:

ماهنامه بین المللی علوم محض و کاربردی، دوره 6، شماره 1 (سال: 1396)

تعداد صفحات اصل مقاله: 13

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## خلاصه مقاله:

Nowadays, large volumes of money transfers done in electronically channel and daily increasing grow in these services and transactions, on the one hand, and anonymity of offenders in the Internet on the other hand, encourage the fraudsters to enter to this field. One of the main obstacles in the use of internet banking is lack of security in transactions and some of abuses in the way of the financial exchanges. For this reason, prevent from unauthorized penetration and detection of crime is an important issue in financial institutions and banks. In the meantime, the necessity of applying fraud detection techniques in order to prevent from fraudulent activities in banking systems, especially electronic banking systems, is inevitable. In this paper, design and implementation system that recognizes suspicious and unusual behavior of bank users in the electronic banking systems. In this paper, we use data mining techniques to detect fraud in electronic banking. For this purpose, we use from a multi-stage hybrid method include: Clustering to separate customers and improve rankings and category for fraud detection. In the clustering method used from k center method and in the category method used from classification of C4.5 decision tree and also bagging's collective method of classification. Finally, the results indicate the high potential of the proposed method. The proposed method in compared with the previous method in the benchmark of accuracy ۳.۲۲ percent, in the benchmark of correctness ۳.۲۷ percent and in the benchmark of convocation ۴.۳۲ percent and in the benchmark of F1 ۳.۸۱ been improved. Nowadays, large volumes of money transfers done in electronically channel and daily increasing grow in these services and transactions, on the one hand, and anonymity of offenders in the Internet on the other hand, encourage the fraudsters to enter to this field. One of the main obstacles in the use of internet banking is lack of security in transactions and some of abuses in the way of the financial exchanges. For this reason, prevent from unauthorized penetration and detection of crime is an important issue in financial institutions and banks. In the meantime, the necessity of applying fraud detection techniques in order to prevent from fraudulent activities in banking systems, especially electronic banking systems, is inevitable. In this paper, design and implementation system that recognizes suspicious and unusual behavior of bank users in the electronic banking systems. In this paper, we use ... data mining techniques to detect fraud in electronic banking. For thi

## کلمات کلیدی:

Electronic banking, Fraud detection, Clustering, Decision tree, Bagging algorithm

