Abstract

Due to advancement of technology the computational algorithms and computer based data analysis are used for making large and effective decision. Therefore a significant role on the human life is observed the main aim of loping such kind of technology is to provide ease in various domains and making future planning for managing the risk. Among various issues the disaster is also a critical risk in today’s scenario of India. Thus the risk management and disaster management techniques are loped for keep in track the losses in controlled manner. In this presented work a new model using the data mining techniques for predicting the disaster and their place is proposed for lopment. Therefore various different data mining techniques and methods are included for loping the accurate and effective data model. The proposed work includes the three main contributions for prediction based technique lopment. First the pre-processing technique lopment by which the unstructured data is processed and filtered for transform the information into the structured data format. Therefore in this phase the Bay’s classifier is used, Secondly lopment of learning technique for accurate pattern learning of the
disasters and their places. Therefore in this phase the k-means clustering and hidden Markov model is employed for performing the training. Finally the prediction and their performance evaluation, in this phase the trained model is used to accept the current scenarios and predict the next event. The implementation of the proposed technique is performed using the JAVA technology and for dataset generation the Google search API is used. After the implementation of the proposed system the performance of the system in terms of accuracy, error rate, time complexity and space complexity is evaluated. The experimental results demonstrate the effective and accurate learning of the system. Thus the proposed data model is adoptive and acceptable for the various real world data analysis and decision making task.

References

1. Li Zheng, Chao Shen, Liang Tang, ChunqiuZeng, Tao Li, Steve Luis, and Shu-Ching Chen, “Data Mining Meets the Needs of Disaster Information Management”, IEEE TRANSACTIONS ON HUMAN-MACHINE SYSTEMS, VOL. 43, NO. 5, SEPTEMBER 2013


8. A Comparative Study of Data Clustering Techniques, KhaledHammouda, Department of Systems Design Engineering, University of Waterloo, Waterloo, Ontario, Canada N2L 3G1


Data Mining based Technique for Natural Event Prediction and Disaster Management

Communication Engineering, Vol. 2, Issue 8, August 2013


22. Xing Wanli, GuoRui, Petakovic Eva, Goggins Sean, “Participation-based student final performance prediction model through interpretable Genetic Programming: Integrating learning analytics, educational data mining and theory”, 2014 Elsevier Ltd. All rights reserved.


25. R. Taghizadeh-Mehrjardi, K. Nabiollahi, B. Minasny, J. Triantafilll, “Comparing data mining classifiers to predict spatial distribution of USDA-family soil groups in Baneh region, Iran”, © 2015 Elsevier B.V. All rights reserved

26. Sasan Barak, Mohammad Modarres, “loping an approach to evaluate stocks by forecasting effective features with data mining methods”, Expert Systems with Applications 2014 Elsevier Ltd All rights reserved.


Index Terms

Computer Science

Information Sciences

Keywords

Data mining, classification, supervised learning, implementation, performance study.