

以六種資料探勘方法分析影響集集大地震引起山崩之重要因子

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摘要

Because of the fast economic development in Taiwan, the demands for land resource are urgent. However, development of the lower plain area in Taiwan has reached its saturation; therefore, development of mountain area has become an obvious trend. When the development of mountain area is not appropriate, it is apt to make soil and rock loose, furthermore cause water and soil conservation problems. After 921 earthquake, a lot of data of landslide in mountainside area was obtained. This study employed six data mining methods, including logistic regression, discriminant analysis, artificial neural networks, k-nearest-neighbors, naïve Bayes classifier, and classification trees, to find the most important factors of earthquake-caused landslide. The results show that the six data mining methods can get similar important factors.

關鍵字：Artificial neural networks, classification trees, data mining, discriminant analysis, k-nearest-neighbors, landslide, logistic regression, naïve Bayes classifier.