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Crime Detection with ICA and artificial intelligent approach

Abstract

The Rise of Crime in Malaysia reported that violent crimes comprised only 10% of reported crimes each year and the majority of crimes, 90%, were classified as property crimes. However, the ratio of police to population is 3.6 officers to 1,000 citizens in Malaysia. This lack of manpower sources ratios alone are not a comprehensive afford of crime fighting capabilities. Thus, we proposed an Artificial Intelligent Techniques to determine the behaviour of the burglar with Independent Component Analysis (ICA), Linear Discriminant Analysis (LDA) and k Nearest Neighbor (k-NN) Classifier. This system provided a good justification as a monitoring supplementary tool for the Malaysian police arm forced.

Keywords

Crime rate; Independent component analysis; Linear discriminant analysis and k-nearest neighbor