

A comprehensive study of crime detection with PCA and different neural network approach

Abstract

Crime rate in Malaysia is almost in awareness stage. The centre for Public Policy Studies Malaysia reports that 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, dealing with these circumstances, we present a comprehensive study to determine bandit behavior with PCA and different neural network algorithm such as Elman Neural Network (ELMNN), Feed Forward Neural Network (FFNN) and Cascade-Forward Neural Network (CFNN). This system provided a good justification as a monitoring supplementary tool for the Malaysian police arm forced.

Keywords

Crime rate; Elman Neural Network; Feed Forward Neural Network and Probabilistic Neural Network; Principal Component analysis