UNIVERSITI TEKNOLOGI MARA

INSPECTOR HAAD
(HUMAN ABNORMAL HUMAN DETECTOR)

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In the name of Allah the most Gracious and the most Merciful

May His blessing be upon the Prophet Muhammad s.a.w.

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ABSTRACT

As the advanced technology development grow, the secureness of citizen became an issue for authorities to find the most reliable technique in maximizing the citizens' safety. Human abnormal activity recognition holds the key in solving the issues faced by authorities. Abnormal activity is classified as a suspicious event that involved a person to act illegally in the residential area which in this case a criminal trying to steal anything from the residence. In this project, the human activity recognition that are proposed could notify the authorities or the owner if any suspicious event detected from a static sensor based CCTV. The features technique used is Gaussian Mixture Models (GMM) which will be compared using two different classifiers K-Nearest Neighborhood (KNN) and Expectation Maximization (EM) that could determined which result is better. The skeleton of dataset used in this project is the KTH dataset and personal dataset which consist 2 categories of suspicious and non-suspicious event with the activity of walking, running, jumping, clapping, boxing and jogging. Overall performance of this system was successfully tested and produced the results thus accomplishing the set goals.

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