DISTRIBUTED EVENTS ANALYSIS RESEARCH GROUP

INTELLIGENT SURVEILLANCE

Real-Time fight detector algorithm

As the number of installed CCTV cameras dramatically increases, the number of personnel watching over them ought to be also increased. This obviously means higher costs that many companies simply cannot afford. As a result, the existing personnel will be in charge of the excess number of cameras. This eventually leads to performance loss.

Our new algorithm helps to ease the burden of focusing the valuable attention of security personnel. The algorithm detects fights and sends a signal when disorderly motion patterns are detected in the video stream. The tuning of this robust and effective algorithm is easy and mostly invariant to the characteristics of video (spatial resolution, refresh rate, view parameters etc.)

Automatic detection of events is a must in the leading video surveillance and video retrieval systems. Our algorithm provides a valuable index key for the database engine when searching for suspicious activities.

Current trends in the video camera market show that in the future IP cameras will become dominant. They transfer the video data in compressed format. Our fight detector algorithm is suitable to operate in this compressed domain thus achieving the multiples of real-time performance.

Application areas

- Video surveillance
- Video feature extraction and annotation

Requirements

- Stationary cameras
- Adjusting the parameters to the actual scene

Features

- Real-Time
- Compressed domain processing ready
- Good overall performance in various scenes

Application demo

Web based fight detector server







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