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(57) Abstract :
The invention relates to a method and system for enhanced keyframe extraction in video surveillance, particularly useful in crime investigation scenarios. This method integrates Spatio-temporal Histogram of Oriented Gradients (HOG) with a Support Vector Machine (SVM), Background Subtraction, and the Visual Geometry Group (VGG) network for improved detection of human presence in surveillance footage. The system focuses on inter-frame differences to identify significant movements or activities, thereby efficiently extracting keyframes relevant to human activities. This approach offers a high compression ratio, indicating effectiveness in reducing video data volume while retaining essential information. The invention is adaptable to various surveillance environments and is characterized by its accuracy, efficiency, and flexibility.

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