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Patent Search

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Abstract:

The current invention has method and system required for automatic detection of forgeries in videos. The underlying system of the invention has provision for super learning which enables ML classifiers to be trained and ensemble for automatic detection of video forgeries. In the training phase, the given training video is divided i of segments or time windows from which frame representation with I, P and B frames is made. Afterward features are extracted to form a feature space which is subj ensemble learning. In the testing phase, the system takes a test video, converts the video into time windows, extract features and then the features are given to ense classifier. The ensemble classifier detects forgeries in the given video with highest accuracy. Since ensemble classifier has the knowledge of multiple constituent class current invention is capable of detecting video forgeries accurately. The current invention is beneficial to stakeholders such as crime investigation agencies, multimec owners, governments, police, forensics departments, researchers and academia.

Complete Specification

Description:FIELD OF INVENTION

The current invention has method and system required for automatic detection of forgeries in videos. The underlying system of the invention has provision for sup
learning which enables ML classifiers to be trained and ensemble for automatic detection of video forgeries. In the training phase, the given training video is divided
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subjected to ensemble learning. In the testing phase, the system takes a test video, converts the video into time windows, extract features and then the features are
to ensemble classifier. The ensemble classifier detects forgeries in the given video with highest accuracy.

A video is divided into number of time windows. Each time window contains an I frame and associated P and B frames. After this each time window is subjected to 1
representation and feature extraction. The extracted features are used to train a ML classifier which learns from the training data. In the testing phase, the learned i
used to detect video forgeries. In the process, the given video is divided into time windows and then frame representation is done. After this, features are extracted
feature spaces is given to multiple ML classifiers that are part of ensemble approach. Finally, the system results in forgery detection in the given input test video.

BACKGROUND OF THE INVENTION

With the emergence of cloud computing and sophisticated video capturing equipment, there is unprecedented growth of video content in the organizations. Often
commercial multimedia content owners produce more video objects. In fact, usage of CCTV cameras in cities also led to increase volume of videos in the storage

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