A Video Fingerprinting Method For Duplicate Detection
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BACKGROUND

Copyright infringements and data piracy have become serious concerns for the ever growing online video repositories in recent years. The uploaded videos on commercial sites are mainly textually tagged. Tags are of little help in monitoring the content and preventing copy-right infringements. The watermarking approach and the fingerprinting approach have been used for detecting such infringements, however, there is still the need for fast algorithms for duplicate detection in large databases.

DESCRIPTION

Researchers at UCSB have developed a fast and accurate method for detection of duplicate videos in a large database. This can be used to detect the presence of copyrighted videos in the database. The method uses very compact yet sufficiently discriminative signatures called video 'fingerprints'.

APPLICATIONS

- Detect duplicate videos in existing database videos
- Identify copyrighted videos in an existing database, using copyright content as a query

ADVANTAGES

- Speed: This method has been tested on a database of 38000 videos, worth 1600 hours of content, and time to find duplicate was 0.03 sec.
- Accuracy: Tests on 1200 videos (worth 50 hours of content) yielded a 3% missed detection rate; tests on a database of 1700 videos (worth 75 hours of content) resulted in a false alarm rate of 3%.
- Verification: The system has a duplicate/non-duplicate detection module

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ADDITIONAL TECHNOLOGIES BY THESE INVENTORS

- Joint Pharmacophoric Space through Geometric Features
- Closure-Tree: An Index Structure for Graph Queries
- Method for Malware Detection and Classification using Image Processing Techniques
- Mind Reader: Reconstructing Complex Images From Brain Activities