

A Novel Method for Parallel Video Data Mining

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Abstract

For efficient video data management, 'video data mining' is required to discover 'semantic patterns' which are not only previously unknown and interesting, but also associated with semantically relevant events ('semantic events') in movies. In order to extract semantic patterns from a movie, we firstly represent it as a multi-stream of raw level metadata that abstracts the semantic information of the movie. Then, regarding to the temporal characteristic of the semantic event of the movie, we extract sequential patterns. In this paper we propose a novel parallel data mining method in order to reduce the expensive computational cost. Finally, we verify whether the extracted patterns can be considered as semantic patterns or not.

Key Words: *Parallel Data Mining, Semantic Patterns, Semantic event, Video.*