

Scene Boundary Detection with Graph Embedding

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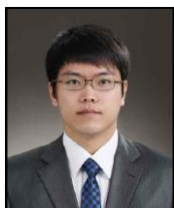
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Abstract—Scene boundary detection is a well-known task in both computer vision and machine learning. Due to the different characteristics of scene boundaries according to applied aspects, scene boundary detection can be casted into an unsupervised learning with multi-view data. This paper suggested the scene boundary detection method which adopts several ways to handle information in multi-view data. More specifically, in the proposed method, a shot is represented with multiple features and then their relations are represented with multiple affinity graphs. In this situation, this paper explains how multiple graphs are combined in a single complementary graph without information loss. In experiments, we tested five methods to combine graphs by using six Korean TV-series. These instructions give you guidelines for preparing papers for IEEE TRANSACTIONS and JOURNALS. Use this document as a template if you are using Microsoft Word 6.0 or later. Otherwise, use this document as an instruction set. The electronic file of your paper will be formatted further at IEEE. Define all symbols used in the abstract. Do not cite references in the abstract. Do not delete the blank line immediately above the abstract; it sets the footnote at the bottom of this column.

Keyword—Scene boundary detection, clustering multi-view data, graph embedding, spectral clustering, video segmentation



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