

VideoLectures.NET Challenge (MediaMixer, transLectures): Temporal segmentation and annotation of lecture videos

Task description and challenge overview:

The proposed Grand Challenge is an extension of the one that was successfully organized as part of ACM MM'13. Similarly to its previous edition, the proposed challenge revolves around the temporal segmentation and annotation of lecture videos. The challenge is driven by the fact that VideoLectures.NET mostly hosts lectures 1 to 1.5 h long linked with slides and enriched with transcripts, metadata and additional textual contents. With automatic temporal segmentation and annotation of the video fragments, the VideoLectures.NET portal would gain in efficiency of the video search engine and would be able to provide users with the option to search for sections within a video, as well as would be able to recommend similar content to its users. This year the challenge again requires challenge participants to develop tools for the automatic segmentation and annotation of videos that could then be implemented in VideoLectures.NET. Extending last year's challenge definition and evaluation methodology, this year we will provide the challenge participants not only with a set of lecture videos and associated multimedia materials (e.g. slides, transcripts) but also with ground truth temporal segmentation of the videos; the challenge participants will be asked to also report results against this ground truth. The ground truth data will be generated via crowdsourcing, which will be organized in advance by the challenge organizers.

Dataset: Videos enriched with slides and transcripts will be provided.

Evaluation metric: There will be two criteria for evaluation.

1. The quality of segmentation and annotation

The key criterion for evaluation is the quality of the segmentations and annotations that are generated for each particular video. Goal: most clearly separated segments and accurate annotations.

2. Service efficiency

Goal: computational complexity and needed computational resources for applying the proposed challenge solution; amount of data that need to be processed; dependencies with third-party online services.

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