CUNI at TRECVID 2015 Video Hyperlinking Task
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Combination of:
• **text-based similarity** calculated on subtitles
• **visual similarity** between keyframes calculated using Feature Signatures
• preference based on whether the query and retrieved answer come from the same TV serie

**Hyperlinking**
- Find data segments which are similar to the query ones.
- Users can browse the archive using the links between query segments and related data segments.

1. Baseline
- All recordings are **segmented** into 60-second passages, new passage is created every 10 seconds.
- Terrier IR Platform
- Text-based retrieval using **subtitles**
- **Metadata** (title, description, broadcast channel)
- **Context** of the query (20 seconds before and after the query segment)
- **Audio information** from Doreso fingerprinting service
- **Visual concepts** recognized in each query keyframe with associated confidence score

2. Postfiltering
- Remove retrieved segments occurring in the query video.

3. Series
- Information on whether the videos came from the same TV series
- Pre-calculated weights for each segment combined with the Baseline run.

4. Feature Signatures (FS)
- Feature Signatures approximate distribution of color and texture in the image.
- Identify keyframes with a similar background.
- Pre-calculated weights for each segment combined with the Baseline run.

5. FSSeriesRerank
- The results returned by the FS system were linearly combined with the same weights as those used in the Series run and reranked accordingly.

<table>
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<th>Run</th>
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<th>MAP</th>
<th>P10</th>
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</table>

Tab1. Performance comparison of results submitted to the Video Hyperlinking Task.

**Conclusion**
- FS run outperformed the Baseline run - helpful in the retrieval of similar backgrounds and settings.
- Information about TV series did not outperform the Baseline run.

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