DEFINING AESTHETIC PRINCIPLES FOR AUTOMATIC MEDIA GALLERY LAYOUT FOR VISUAL AND AUDIAL EVENT SUMMARIZATION BASED ON SOCIAL NETWORKS

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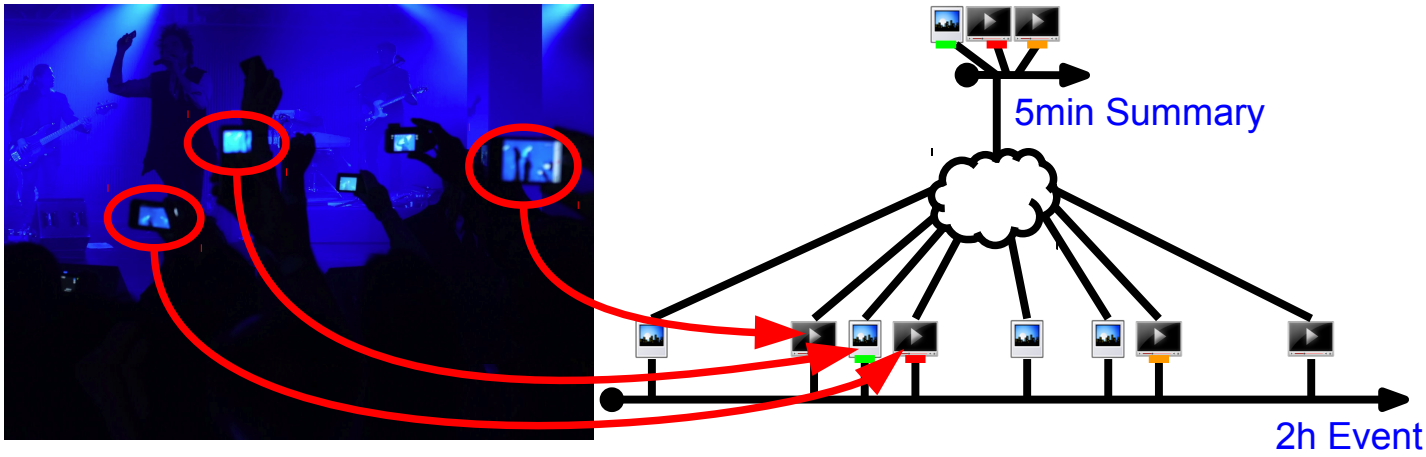
Event-Related Media Items



Ranking of Media Items

Ranking Feature Extraction from **Media Items** & associated **Microposts:**

Visual:
- **High-level:** logo detection, face detection, camera shot detection, OCR…
- **Low-level:** file size, resolution, duration, geolocation, creation time…

Audial:
- **High-level:** presence of silence, speech, music, mix thereof; ASR…
- **Low-level:** bit rate, volume, frequency spectrum analysis…

Textual: named entity recognition and disambiguation, links to LOD cloud…
Social: number of shares, mentions, views, likes, comments; user diversity…

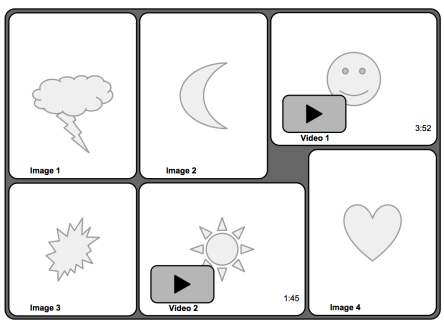
For a set $M = \{m_1,\ldots,m_n\}$ of n media items and a ranking formula f, determine $\boldsymbol{f(M) = M'}$, *i.e.*, the resulting ranked list of media items for a media gallery.

Media Gallery Aesthetics

For each point t_x on timeline T, the **State of the Media Gallery** at t_x is defined for each media item m_i as a set S_x of n tuples $s_{x,i}$ where $s_{x,i} = \langle left, top, width, height, alpha, z\text{-}index, animation, start, playing, volume\rangle$ (CSS-based).

Audial aesthetics: volume normalization, smooth transitions, no parallel music/speech…

Visual aesthetics: composition of videos and images globally, scene-, and point-in-time-wise; regards color, transitions, perceptive capacity…



Media Gallery: optimize **visual** & **audial aesthetics**.

Partially funded by the EU FP7 I-SEARCH Project Project Reference 248296