POLYMNIA
Ambient Multi-Camera Personal Documentaries

Digital technologies offer the ability to move beyond using personal camcorder or camera phones to document significant events in our lives, such as family celebrations or visits to tourist attractions. POLYMNIA supports ambient real-time video documentation of visitors’ activities at cultural and leisure destinations to capture their experiences from entirely new perspectives.

POLYMNIA provides a complete solution for automated video documentation of visitor activities in leisure destinations including amusement parks, art galleries and museums.

The MPEG-7 semantic annotation of the camera footage is processed using a rule engine that applies a set of predefined, venue-specific editing templates specified by a film director. Editing rules are triggered by the semantic annotations to define a series of shots that result in a personalized film for every visitor.

A rule-based approach to selecting and hierarchically composing visitor specific shots makes the system more robust to unexpected input, for example where the visitor is obscured and not detected by the tracking module. A rule-based approach also allows continuity rules to be easily observed and stock content to be matched according to time of day, season, weather and lighting.

The MPEG-7 record of on-camera appearances allows footage featuring the visitor to be automatically selected for a personalized documentary that the visitor can take away with them when they leave. A live switched-camera video feed can also be streamed to remote eVisitors, allowing friends and family to simultaneously share the experience.

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