Issues in

Designing Novel Applications for Emerging Multimedia Technologies

At the Workshop: Interactive Information Access: Untangling Tasks and Technologies
CWI, Amsterdam, 7 December 2010

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Novel Applications
- Photo-blogging with Automatic Face Annotation
- Visual Diary with SenseCam
- Personal Mobile Photo Manager
- CCTV Video Searching
- Personalised News Update on Mobile
- Competitive Card game
- In-car Video Navigator
- Image Searching using External Sample Objects
- Object-based Searching
- Communal Online TV Broadcast Recorder
- Movie Browser for Film Study Class
- Movie Scene Browser
- My Diet Monitoring and Analysing
- Field sports summariser

Emerging MM Tools
- Face Recognition
- Movie Scene Segmentation
- Keyframe Extraction
- News Retrieval
- Object Detection & Tracking
- News Story Segmentation
- Video Recommendation
- Sports Summarisation
- Pedestrian Detection
- Content-based Relevance Feedback for Video
- Large-scale Image Retrieval
- Content & Context Augmentation
- GPS location-based UAV Video Retrieval
- LifeLogging Data Indexing & Retrieval
- Fusion of Image and Text Evidence
Object contour detection was semi-automatically checked/annotated for the small number of data set


Created user base over 5-year period by deployment effort, but...

- Manually indexing Story Segmentation results for its 3-year archive
- Correcting news story boundaries each morning for 1 year


“Ideal” menu widget for Multi-touch Wall?

Dividing menu system into two:

- **Global functions**
  - Affect everyone
  - Awareness/warning
  - Communal access
- **Local functions**
  - Affect only me
  - Appear near me
Conclusion

In designing novel applications that incorporate emerging Multimedia technologies:

• Need alternative design methodology - clues may be solutions not problems
• Leverage designers’ ability to work in unclear problem situation
• Design to hide(?) inaccurate MM output
• Consider making demo system with novel interaction platforms, not just PC/Web and Mobile

THANK YOU