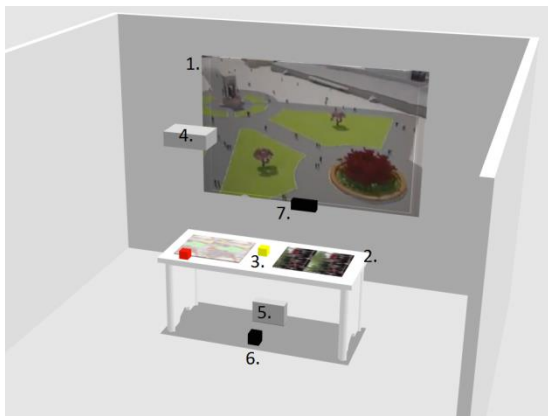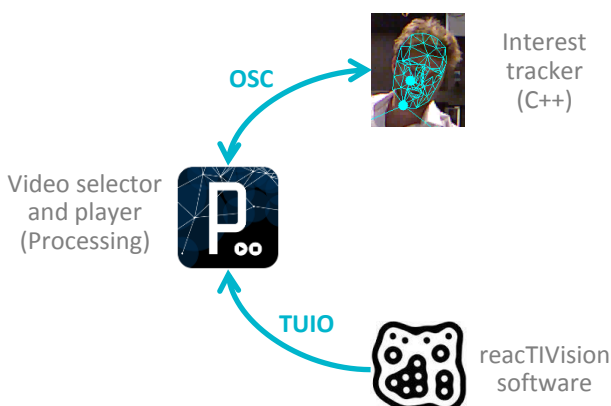# Social Documentary
An interactive and evolutive installation to explore crowd-sourced media content

Installation setup

- 1. Main screen
- 2. Second screen / reactable[2]
- 3. Tangible controls
- 4. Main videprojector
- 5. Second videoprojector
- 6. Webcam
- 7. Kinect sensor

3 software parts communicating through OSC protocol

- Video selector and player (Processing)
- OSC
- Interest tracker (C++)
- TUIO
- reacTIVision software

Multimedia content and video annotation

- Video and text content from social networks
- Related to the social events that happened in Istanbul (Turkey) in June 2013
- Segmentation in shots and video analysis to get concepts (LinkedTV platform tools)[1]
- Conversion of the result into subtitle (*.srt)
- Manual edition of the subtitle file
- Each segment annotated with keywords picked among 18 (3 classes, 6 per class)
- Each segment has a score, as +1 in social networks

00:01:53,356 --> 00:04:22,994
demonstrators - shouting - joy
3

Video selection
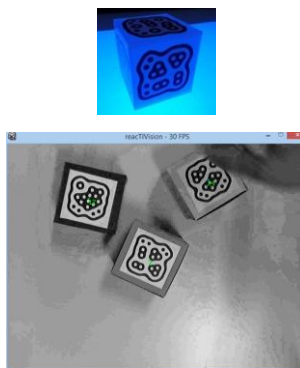
- 3 cubes covered with augmented reality markers[2]
- Markers correspond to keywords from 3 classes: people, action, emotion
- Markers tracking with reacTIVision software[2]
- Probability to display a segment

Visitors interest

- Performed with a MS Kinect Sensor, face tracking and gaze estimation with Kinect SDK[3]
- Segment score incremented when a visitor spend more than 5.5 seconds[4] watching at the main screen
- Joint attention - 2 visitors looking at the same area - leads to display text message (tweet) on the main screen

References
1. Stein, D., Apostolidis, E., Mezaris, V., Abreu, N. D., and Mller, J. Semiautomatic video analysis for linking television to the web. In Proc. *FutureTV Workshop* (2012), 1–8.
2. R. Becina, M. Kaltenbrunner and S. Jordá, "Improved Topological Fiducial Tracking in the reacTIVision System.," Barcelona, 2005.
3. http://msdn.microsoft.com/en-us/library/jj130970.aspx
4. Hawkins, R. P., Pingree, S., Hitchon, J., Radler, B., Gorham, B. W., Kahlor, L., Gilligan, E., Serlin, R. C., Schmidt, T., Kannaovakun, P., and Kolbeins, G. H. What produces television attention and attention style? Human Communication Research 31, 1 (Jan. 2005), 162–187.

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