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Real-time Head Pose Tracker

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Availability of cheap video cameras and sufficient computing power of current personal computers make video-driven human-computer interfaces feasible. We have developed an automatic facial feature tracker and head pose estimator.

Design Requirements

- real-time performance
- single cheap uncalibrated video camera
- unobtrusive

Adopted Approach

- robust multi-stage localization architecture
- insensitivity to changes of illumination and background complexity
- real-time tracking achieved

Possible Application Areas

- novel human-computer interfaces
- game and entertainment industry
- help for the handicapped

System set-up



Have a look at tracking examples
(in MPEG format):

- [short video](http://cmp.felk.cvut.cz/cmp/demos/Tracking/head/0:17-Oct01.mpg) (17 seconds, 3MBytes)
- [long video](http://cmp.felk.cvut.cz/cmp/demos/Tracking/head/1:47-Oct01.mpg) (1:47, 18MBytes)