

Instructor Tracking

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We describe a method for real-time head position tracking using an image-based model. The model consists of a set of images of the head annotated with the projection of a 3D point rigidly attached to the head.

The model is constructed off-line from a sequence of image pairs acquired with two calibrated cameras. The rigidly attached point is first defined in a pair of images with a user specified correspondence and then its projection is automatically propagated to the other images. At run time, the point is tracked by locating its projections in the current pair of images of the head, using the image-based model, and then by triangulating its 3D position.