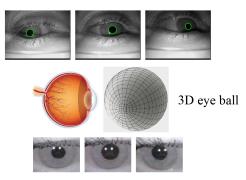
3D Eyeball generation based on vein motion

Description:

Based on the motion of the veins, iris and pupil in the eyeball a 3D eye model should be automatically generated.



Task:

The first step is robust feature extraction. This can be done using SURF, SIFT, BRISK or MSER features if sufficient. Those features have to be mapped on features found in consecutive images. Based on the displacement a 3D model has to be computed. This model is used afterwards for gaze position estimation.

Requirements:

Knowledge or interest in image processing, 3D reconstruction and feature extraction.

Supervisors:

Thomas Kübler, Wolfgang Fuhl

Stand 2. November 2016