Motivation

With the fast-growing online-shopping industry, we are motivated to develop an interactive screen which gives customers an opportunity to see what the sunglasses might look like without having to enter the store and physically wear it. In our system, an image of desired sunglasses is fairly accurately fitted on the human face and people can see whether the sunglasses really fit them from different positions.

System Design

- Initialize positions of eye centers and mouth corners.
- Tracking the four control points using template matching and kalman filter.
- Calculate homography matrix.
- Render the sunglasses on human face.

Implementation