

Googly Eyes Cam

Augmented Reality Eye Tracking App – Project Documentation

Building Web and Mobile Apps

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Jonas Kleinkauf (Mat.Nr.: 143871)

1. **Project Idea**

* Based on Paper „Remote visual tracking for the mobile web”
* Creating a server application that does the heavy computation work for computer vision
* Sending calculated data (vectors) back to client to show 3D data ontop of recorded video
* App inspired by the popular photo chat app Snapchat, where several AR filters are available to modify selfie photos
* Idea: App records video, sends video frames to the server, server calculates the position of faces and eyes in the frame. 3D googly eyes are then placed on the tracked eye positions for a comical effect
* User can then save a snapshot of the funny selfie photo
* Settings screen allows to configure the IP of the remote server
* (Optional settings allows to use a local client sided eye tracking library to compare results)
* App developed as Cross Platform App using Apache Cordova and Web Technologies on the clientside
* Since no personal Apple Devices available, for now only compiled for Android Smartphones, but can totally be ported to iOS with little effort.

1. **System Architecture**
2. **Server Software**
3. **Client App**
4. **Screenshots**
5. **Summary**