

PriView

Exploring Visualisations to Support Users' Privacy Awareness

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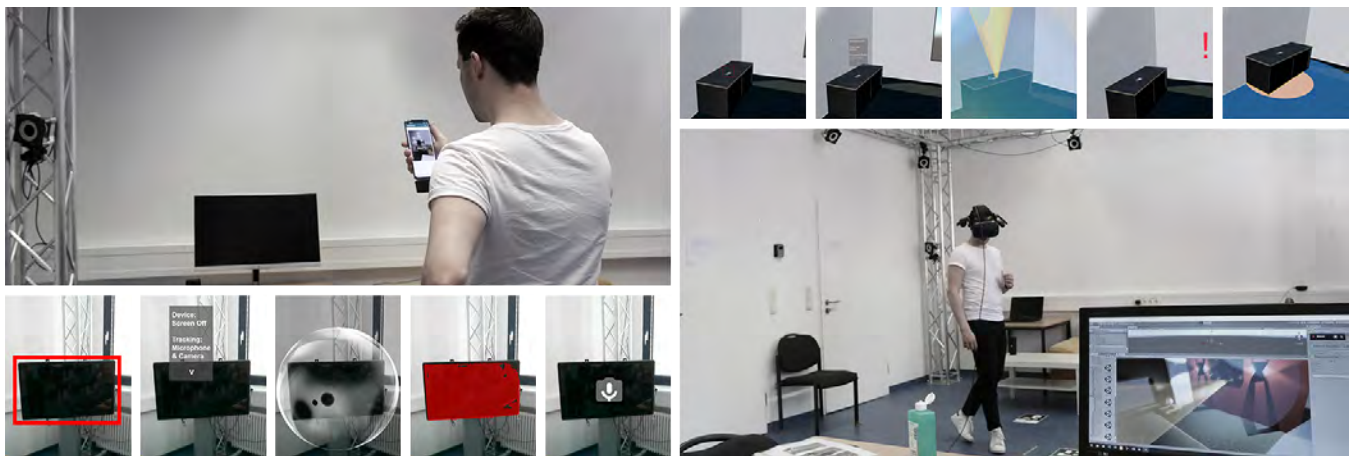


Figure 1: We present *PriView*, a concept to visualise potential privacy intrusion (i.e., video or audio recordings) in the users' vicinity. We compared two output devices, namely a mobile application (left) and a head-mounted display (right). We implemented five visualisations for each. We found that details in the form of text labels were preferred in both versions. However, more subtle indications were considered adequate in some scenarios.

Abstract

We present *PriView*, a concept that allows privacy-invasive devices in the users' vicinity to be visualised. *PriView* is motivated by an ever-increasing number of sensors in our environments tracking potentially sensitive data (e.g., audio and video). At the same time, users are oftentimes unaware of this, which violates their privacy. Knowledge about potential recording would enable users to avoid accessing such areas or not to disclose certain information. We built two prototypes: a) a mobile application capable of detecting smart devices in the environment using a thermal camera, and b) VR mockups of six scenarios where *PriView* might be useful (e.g., a rental apartment). In both, we included several types of visualisation. Results of our lab study (N=24) indicate that users prefer simple, permanent indicators while wishing for detailed visualisations on demand. Our exploration is meant to support future designs of privacy visualisations for varying smart environments.

Original Reference

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Project Webpage & PDF: <https://go.unibw.de/priview>