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the user study is a fundamental method used in hci. in designing user studies, we often use compensation strategies to incentivize recruitment. however, compensation can also lead to ethical issues, such as coercion. the chi community has yet to establish best practices for participant compensation. through a systematic review of manuscripts at chi and other associated publication venues, we found high levels of variation in the compensation strategies used within the community and how we report on this aspect of the study methods. a qualitative analysis of justifications offered for compensation sheds light into how some researchers are currently contextualizing this practice. this paper provides a description of current compensation strategies and information that can inform the design of compensation strategies in future studies. the findings may be helpful to generate productive discourse in the hci community towards the development of best practices for participant compensation in user studies. we present electroring, a wearable ring-based input device that reliably detects both onset and release of a subtle finger pinch, and more generally, contact of the fingertip with the users skin. electroring addresses a common problem in ubiquitous touch interfaces, where subtle touch gestures with little movement or force are not detected by a wearable camera or imu. electrorings active electrical sensing approach provides a step-function-like change in the raw signal, for both touch and release events, which can be easily detected using only basic signal processing techniques. notably, electroring requires no second point of instrumentation, but only the ring itself, which sets it apart from existing electrical touch detection methods. we built three demo applications to highlight the effectiveness of our approach when combined with a simple imu-based 2d tracking system.

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remote gesture recognition (rgb-d cameras) could represent an interesting alternative to pointing devices such as mice and stylus-based tablets. however, current gesture recognition systems for remote control suffer from the fact that they typically require calibrated user-input devices, such as mice, pointing devices, or at least a stylus. we present a novel approach for detecting user gestures (hand shape or hand pose) from rgbd images using the slam++ framework, which can be used to feed the gesture recognition system with the geometry inferred by the method. using this approach, we can detect hand gestures from rgbd images taken directly from the webcam without any user calibration. we show that it is possible to accurately discriminate between different hand poses and achieve a 92.5% average accuracy for hand pose detection from rgbd images without any calibration, and up to 99.78% using the point feature histograms (pfh) local motion feature extracted from the finger tip positions. driving detection algorithms are used by numerous organizations in order to benefit from autonomous driving. however, recent studies have shown that such algorithms are susceptible to adversarial examples, which are models that are designed to fool the detection system in a particular situation. we performed experiments to introduce adversarial examples to two different state-of-the-art detection systems and measure their effect on the detection result. we did so by making small changes in a traffic sign detection model that causes the model to classify almost all traffic signs as a pedestrian crossing, a valid result that is usually given as an erroneous result. we then measured how the result was perceived by the humans operating the system. we found that the humans were not familiar with the specific adverarials introduced, and that their involvement in control affected the results. we speculate that this effect can be mitigated by transparency in the error handling procedure. we also found that the effect of the adversarial examples on the reported result was very similar to how humans judged false reports by experienced drivers. this indicates that the actual risk is not much different than the one encountered by experienced road users. 5ec8ef588b