

Augmenting Real-world Objects by Detecting “Invisible” Visual Markers

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This paper describes a vision-based method for detecting and identifying real-world objects in front of the users. The proposed method employs “invisible” visual markers, which are invisible from the users but visible from the ObjectCam2, our camera device. The ObjectCam2 is equipped with IR LEDs around the lens that blink synchronously with the image capture, and the invisible markers consist of lucent and retro-reflective paint. UbiComp applications can be implemented without suffering from the power supply problem nor intrusive visual markers.

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