A Hand Pose Tracking Benchmark from Stereo Matching

**ABSTRACT**

In this paper, we established a long-term 3D hand pose tracking benchmark. It contains 18,000 stereo image pairs as well as the ground-truth 3D positions of palm and finger joints from different scenarios. Meanwhile, to accurately segment hand from stereo images, we propose a novel stereo-based hand segmentation and depth estimation algorithm specially tailored for hand tracking here. The experiments indicate the effectiveness of the proposed algorithm by demonstrating that its tracking performance is comparable to the use of an active depth sensor under various challenging scenarios.

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Research Interests: Low Level Vision

All are welcome!