

What are the current limits of the Kinect™ sensor?

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ABSTRACT

The Kinect sensor offers new perspectives for the development and application of affordable, portable and easy-to-use markerless motion capture (MMC) technology. However, at the moment, accuracy of this device is still not known. In this study we compare results from Kinect (MMC) with those of a stereophotogrammetric system (marker based system [MBS]). 27 subjects performed a deep squatting motion. Parameters studied were segments lengths and joint angles. Results varied significantly depending on the joint or segment analysed. For segment length MMC shows poor results when subjects were performing movement. Differences were also found concerning joint angles, but regression equations were computed for each joint that produced the same results for MMC and MBS after correction.

Full papers will be published in the Conference Proceedings and will be available to delegates at the conference on Sept. 10.

Full papers will be released on-line in the ICDVRAT archive on March 15.