Upper limb tracking using depth information for rehabilitative tangible tabletop systems

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ABSTRACT

The motor impairments that affect the upper limb, such as those following an acquired brain injury, are particularly disabling, since this body segment is involved in the majority of the activities of daily living. Virtual reality systems have been reported to stimulate the clinical effectiveness of the rehabilitative strategies, providing intensive and repetitive exercises in a motivating and controllable environment. The tracking of the upper limb movements in the real world is a challenging task that has traditionally involved different tracking systems. The use of depth sensors can provide a non-invasive solution that can be integrated in tabletop systems.

Full papers will be published in the Conference Proceeding s 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.