

Haptic presentation of 3D objects in virtual reality for the visually disabled

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ABSTRACT

The paper presents an initial research on haptic perception of 3D objects in a virtual reality environment for aiding the visually disabled persons in learning new routes and obstacle identification. The study spans a number of fields, from the very technical, such as scene segmentation and obstacle detection algorithms to psychological aspects such as the effectiveness in utilizing haptic information. The authors constructed a prototype system for the tactile presentation of real objects in a virtual reality.

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.