UnB-3D Database

DIGITAL SIGNAL PROCESSING GROUP (Grupo de Processamento Digital de Sinais, GPDS)

University of Brasília (UnB)

Citation

The UnB-3D database is available to the research community free of charge. If you use it in your research, we kindly ask that you to cite this website.

Contact Information

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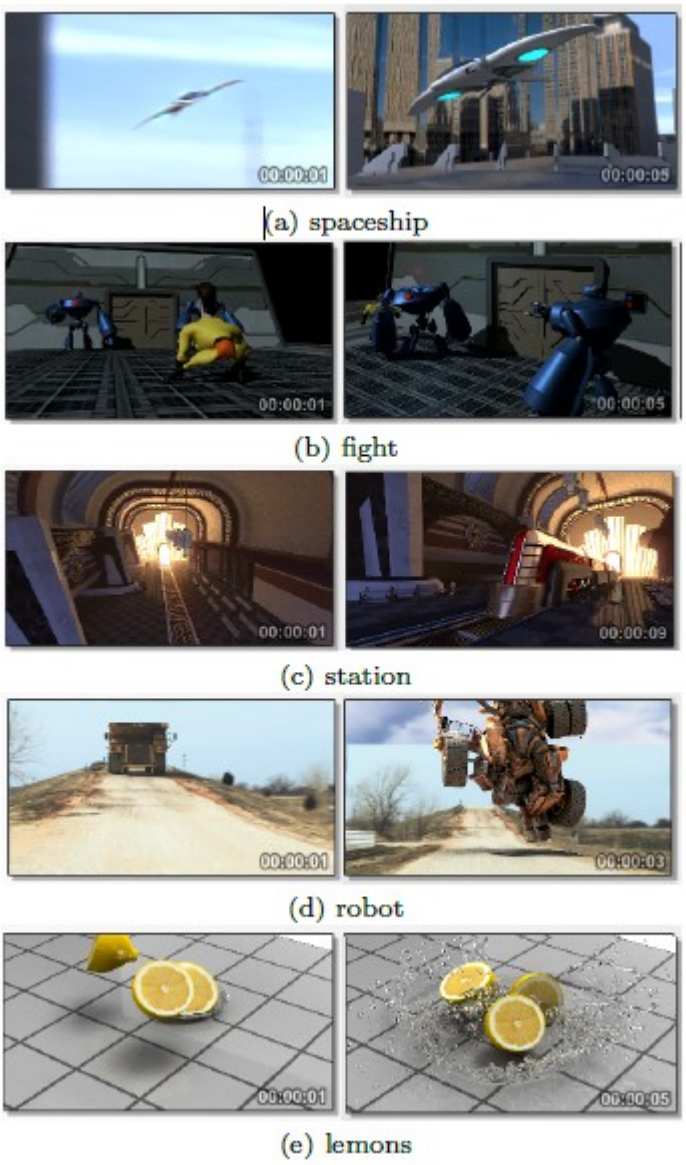
Details about the database:

The UnB-3D database is a set of five CGI 3D scenes rendered using 3D models with various camera configurations.

HRC	Translation	Zero Parallax	3D Format	label
HRC01	no	inexistent	non-existent	2D
HRC02	no	center	2 views	middle
HRC03	no	back	2 views	back
HRC04	no	front	2 views	front
HRC05	yes	back	2 views	back
HRC06	yes	front	2 views	front
HRC07	no	center	2 views	toe-in
HRC08	yes	center	2 views	toe-in
HRC09	no	center	ColorPlusDepth	fake-3D
HRC10	no	center	ColorPlusDepth	cardboard

HRC01 corresponds to a 2D rendering, i.e. the scene was rendered using only one camera. This does not correspond to using only the left or right view, but to positioning a single camera in the central optical axis and, then, performing the rendering process. HRC02, HRC03, and HRC04 were rendered using an off-axis 3D camera with three different zero-parallax positions, which vary according to the camera focal distance. The three parallax positions were center (HRC02), back (HRC03), and front (HRC04). HRC05 and HRC06 were created by horizontally shifting the image. HRC05 and HRC06 were created by horizontally shifting the image in software during the experiment execution. HRC07 and HRC08 correspond to 3D renderings using a toe-in camera configuration. When compared to HRC07, HRC08 scenes have an excess in the vertical disparity,

which was introduced by a vertical translation of the image during the experiment execution. The HRC09 scenes correspond to a 3D rendering implemented using a simple Depth-image-based rendering (DIBR) algorithm. The inputs to the DIBR algorithm were the HRC01 scene (i.e. a 2D scene) and its corresponding depth map. HRC10 scenes are produced by a quantized depth map, using the same procedure used to generate the fake 3D.



File List:

- SCENE_NAME-label — For each scene
- rawData.xlsx — MOS of every participant on the experiment.
- Readme.pdf — This file

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