

Tracking objects outside the line of sight using 2D intensity images

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Supplementary Video

This video shows two real-time tracking sessions (Session 1: translation only; Session 2: translation and rotation) using the described setup. A live view of the hidden scene is shown next to the output from the tracking software. The average reconstruction rate during these tracking sessions was 10.2 frames per second (limited by the maximum capture rate of our camera-laser setup) for Session 1, and 3.7 frames per second (limited by computation) for Session 2. The 2-dimensional car model was represented by 502 surfels; the total compute time required for a single tracking step was 72.9 ms for translation only, and 226.1 ms for translation and rotation.