

# Supplementary Material: Creating and Reenacting Controllable 3D Humans with Differentiable Rendering

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We provide in this document some supplementary material to our WACV submission. These qualitative results were not included in the paper submission due to page space restrictions. Section 1 shows image sequences of the rendering presented in Figure 5 of the paper, and Section 2 shows additional frames used to compute the metrics in Table 2. We also provide a video for more visual qualitative results and details.

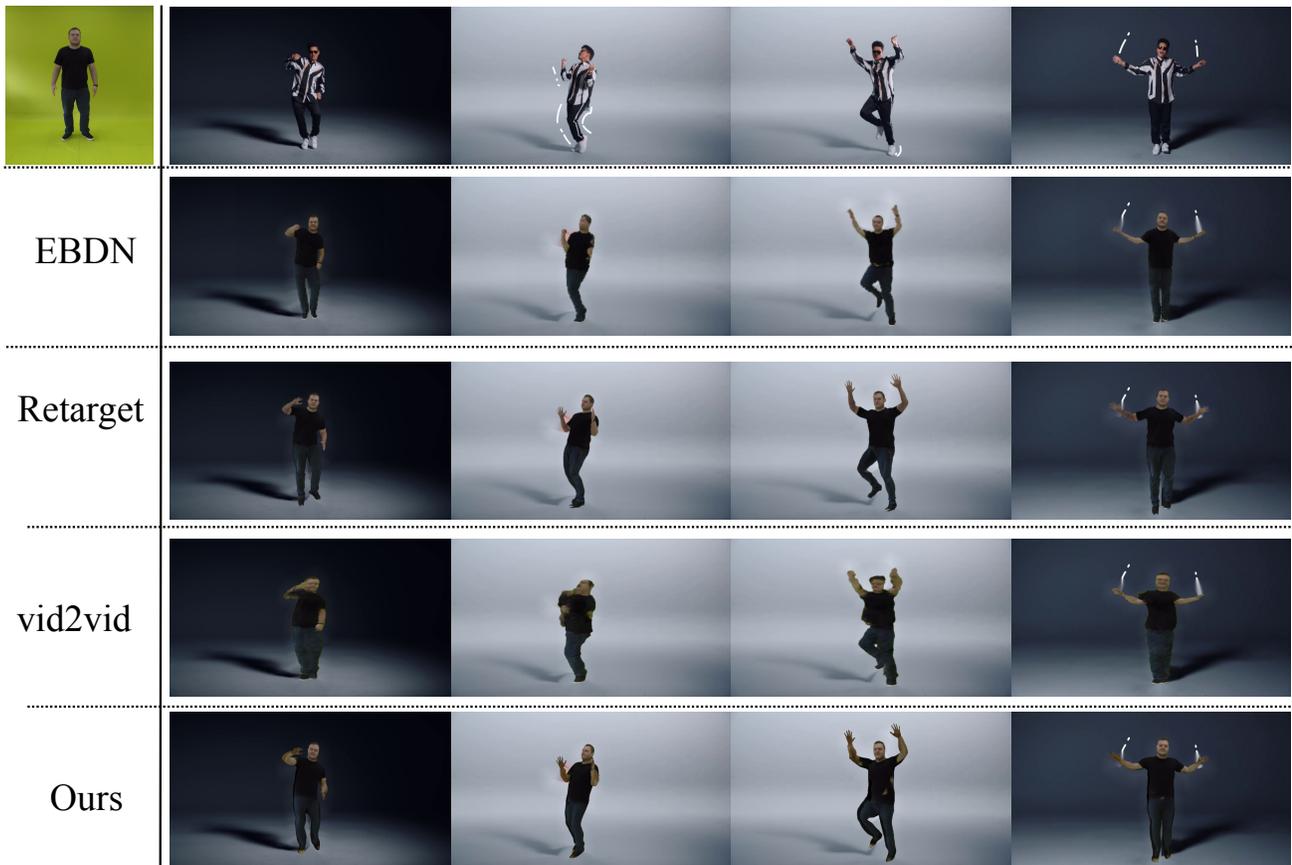


Figure 1: **Qualitative evaluation in bruno-mars sequence.** First row: original video and target actor; Second row: EBDN results; Third row: results of Retarget; Fourth row: results of vid2vid; Fifth row: Our results.



Figure 2: **Qualitative evaluation in tom-cruise sequence.** First row: original video and target actor; Second row: result of EBDN; Third row: results of Retarget; Fourth row: results of vid2vid; Fifth row: Our results.

## 1. Additional Qualitative Results

We start presenting examples from four YouTube videos that are publicly available (Figures 1 and 2). These results were introduced in Figure 5 (of the paper submission). We also performed the rendering and transferring in the publicly available videos using EBDN, Retarget, vid2vid, and our approach.

## 2. Qualitative Results in the Dataset Videos

In this section, we show the visual results of the quantitative metrics presented in the paper on Table 2 (Figures 3 and 4). We performed the transferring in the dataset videos using EBDN, Imper, Retarget, vi2vid, V-Unet, and our approach. One can notice the large discrepancy between the quality of the frames for the same method.

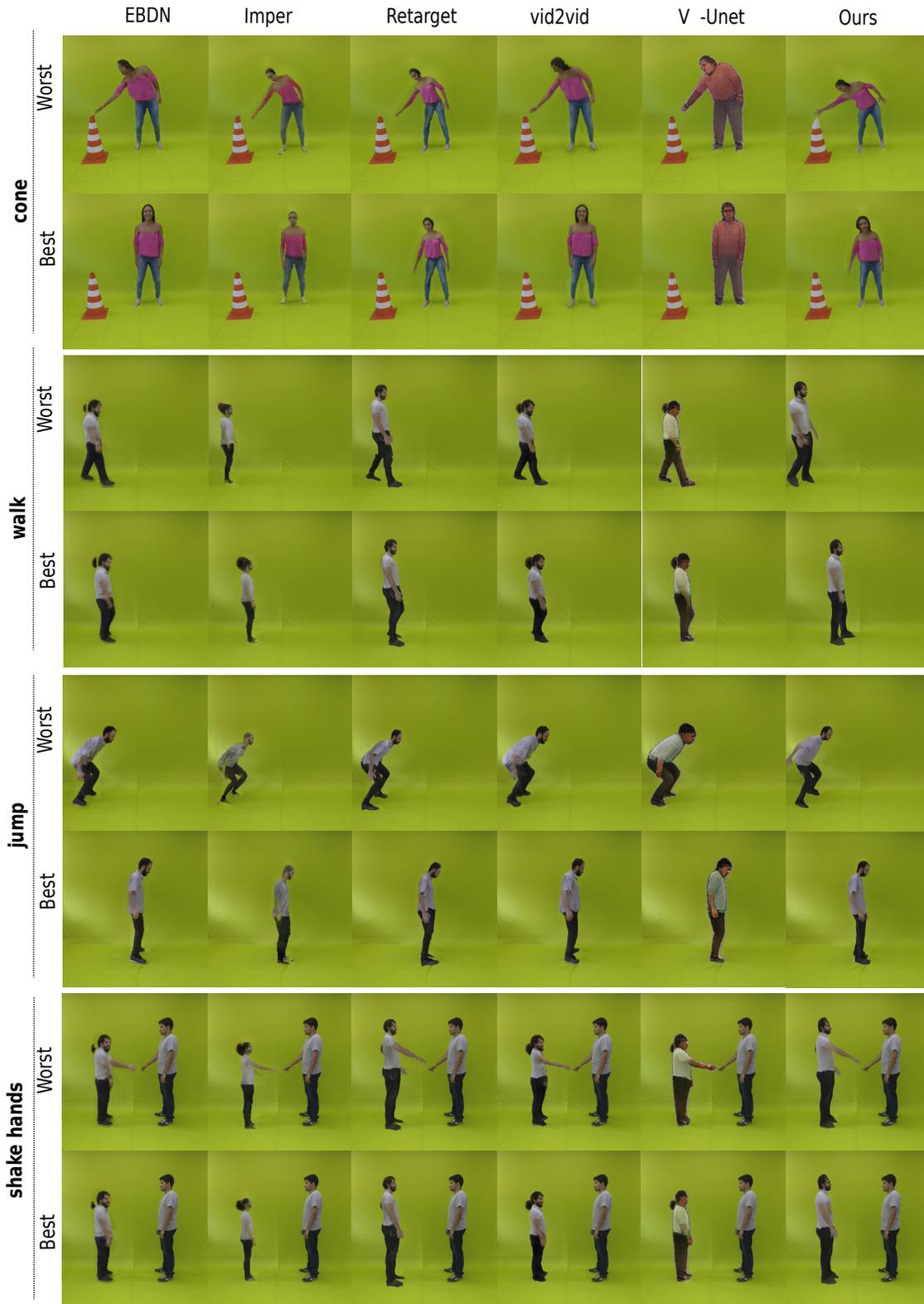


Figure 3: **Qualitative comparison in the controlled dataset.** Movements are represented in the rows. The results for each competitor are represented in the columns.

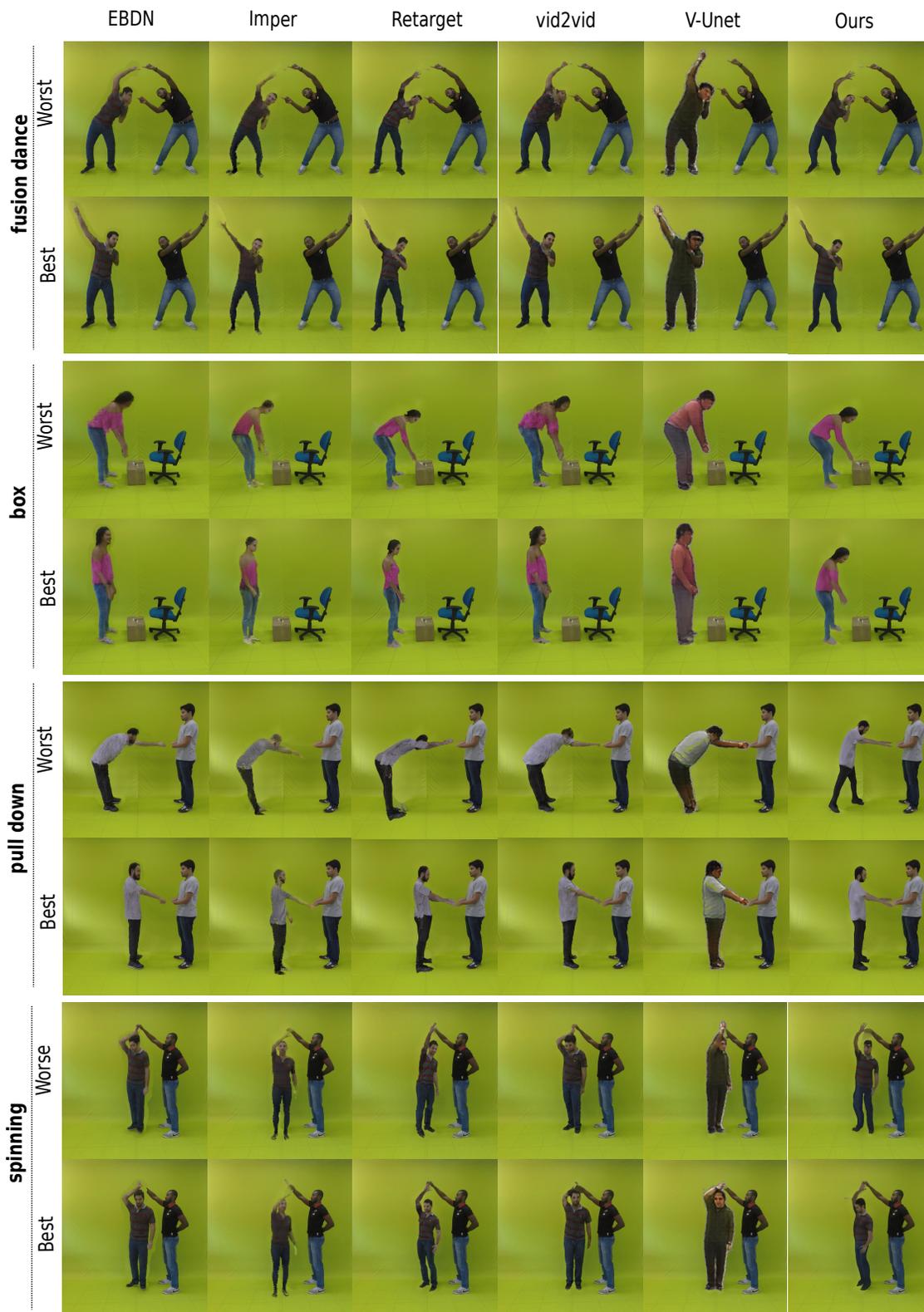


Figure 4: **Qualitative comparison in the controlled dataset.** Movements are represented in the rows. The results for each competitor are represented in the columns.