

3D Human Shape and Pose from a Single Low-Resolution Image with Self-Supervised Learning

Supplementary Material

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1 More Qualitative Results

We provide more visual comparisons against the baseline methods [1, 2] in Figure 1. The proposed algorithm is able to achieve high-quality 3D human shape and pose estimation for the challenging low-resolution input.

2 Generalization to Real-World Images

We also evaluate the proposed algorithm on real-world low-resolution images. As shown in Figure 2 and 3, our method generalizes well to real scenarios.

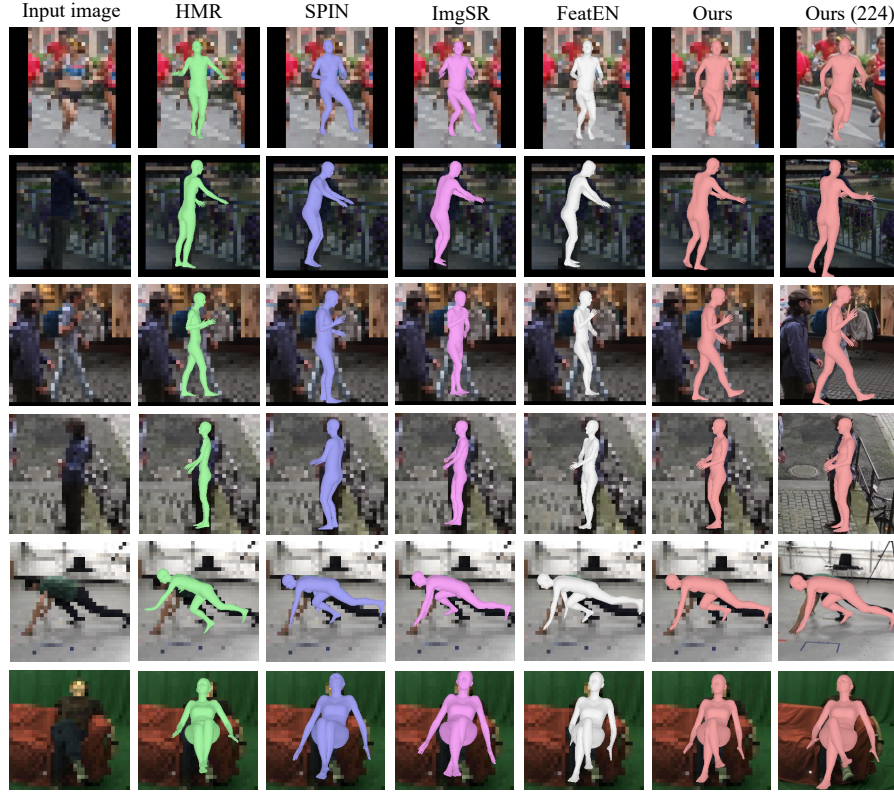


Fig. 1. Visual comparisons with the state-of-the-art methods on challenging low-resolution input. The input image has a resolution of 32×32 . The results of high-resolution images are also included as a reference.

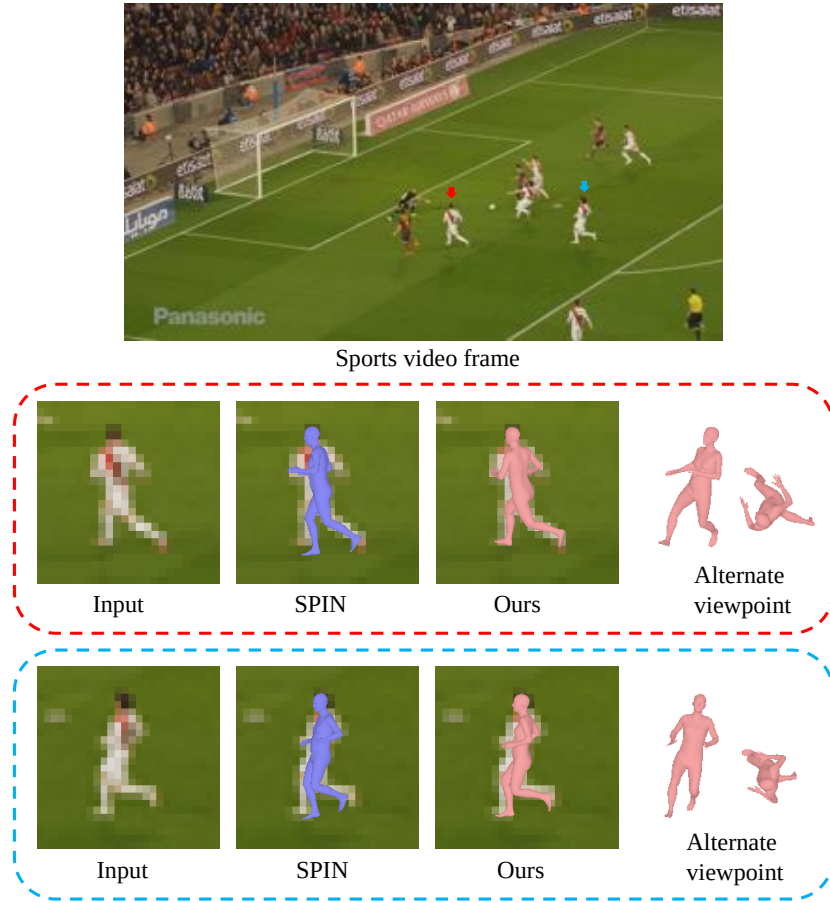


Fig. 2. 3D shape and pose of low-resolution humans captured from a real sports video.

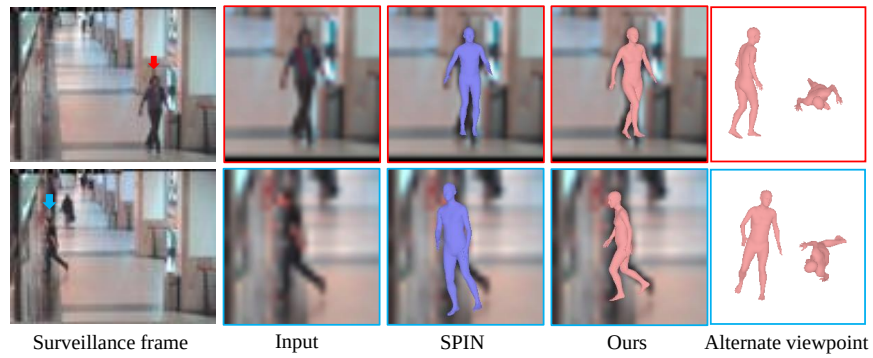


Fig. 3. 3D shape and pose of low-resolution humans captured from a real surveillance video.

References

1. Kanazawa, A., Black, M.J., Jacobs, D.W., Malik, J.: End-to-end recovery of human shape and pose. In: CVPR (2018) [1](#)
2. Kolotouros, N., Pavlakos, G., Black, M.J., Daniilidis, K.: Learning to reconstruct 3d human pose and shape via model-fitting in the loop. In: ICCV (2019) [1](#)