Supplementary Material
From Skin to Skeleton: Towards Biomechanically Accurate 3D Digital Humans

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In this document we provide supplementary information regarding
the qualitative comparison of SKEL to OSSO [Keller et al. 2022].

1 QUALITATIVE COMPARISONS WITH OSSO

To complement Sec 6.4 of the main manuscript, we provide more
qualitative comparisons of the skeletons computed by OSSO [Keller
et al. 2022] and fitting SKEL to SMPL meshes of the Total Capture
dataset [Trumble et al. 2017]. The results in Fig. 1 illustrate that SKEL
provides better bone locations and orientations. This is particular
visible in regions such as the ulna and knee where the bones of the
articulation have a coherent orientation.

REFERENCES

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Fig. 1. Given SMPL meshes from the Total Capture dataset [Trumble et al.
2017] (in blue) we obtain OSSO [Keller et al. 2022] (left two columns) and the
aligned SKEL skeleton (right two columns). SKEL provides a more anatomi-
cally correct skeleton, particularly at the joint level bone orientation, such
as the knee and elbow.