Appendix A: The Accuracy of 2.5D Sketches Prediction

To demonstrate the accuracy of our 2.5D sketches prediction and the existence of a trade-off between surface details and the plausibility of the reconstruction (rather than the inaccuracy of our 2.5D sketches prediction leading to imperfect reconstructions). Figures 1 shows the results of our 2.5D sketches prediction. It can be observed that the predicted normals, especially those in the visible regions, exhibit rich details, surpassing even the details found in real visible normals. While the normals in the invisible regions may have slightly less detail, all details remain plausible, such as the hand details and facial features. The prediction of the depth map also appears reasonable, with regions closer to the camera appearing darker, as expected. It is important to note that actual depth values are not provided here due to the absence of a concept of "GT depth" in the depth map. Depth varies with the distance between the mesh and the camera, whereas the depth predicted by our 2.5D sketch prediction network is defined within the reconstruction space of the training dataset and cannot be directly compared to the camera space depth in the test dataset.

Figure 1: *The accuracy of 2.5D sketches prediction*