

# Supplemental for V-VIPE: Variational View Invariant Pose Embedding

Mara Levy  
University of Maryland, College Park  
mlevy@umd.edu

Abhinav Shrivastava  
University of Maryland, College Park  
abhinav@cs.umd.edu

## 1. Contents

Included in the supplementary material are several extra pages of results. In Figure 1 we include several results that show the effect of adding noise to an embedding for a pose. In Figure 2 we show that by finding embeddings in between two poses we can generate way point poses. Figure 3 shows the results of querying several images.

## References

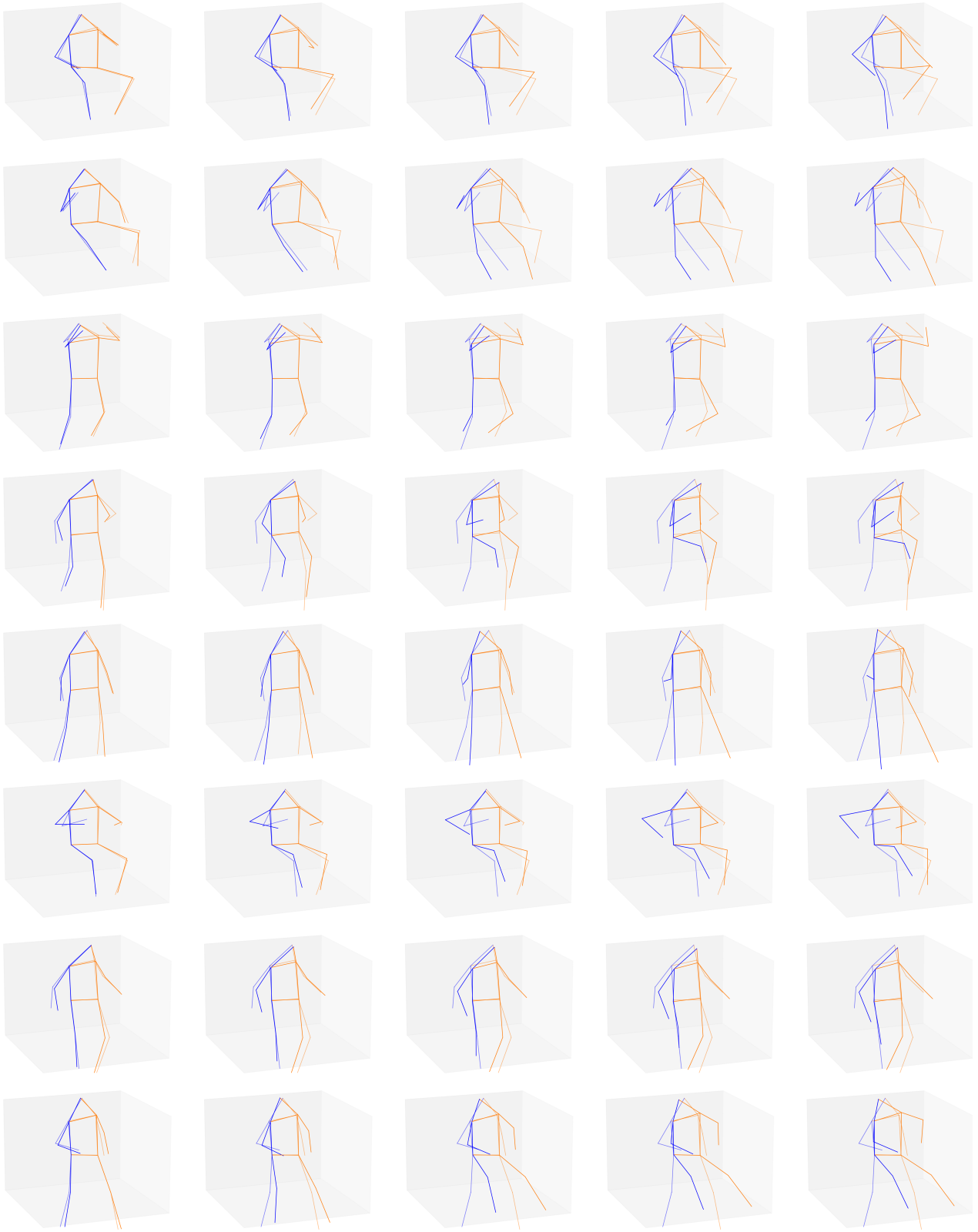


Figure 1. In this figure we show what happens when we add random noise to the embedding space for a pose. For each original pose we sample noise and then add it to the original embedding in larger magnitudes. The smallest magnitude is on the left and we increase the magnitude of noise as the images move to the right.



Figure 2. Given the frame on the left and the frame on the right for each example we show our models ability to generate frames in between two poses. We take the mean for the embedding space of two poses, calculate the distance between those two means and then add a portion of the distance to the embedding on the left at each step. The images seen in the middle three columns are all generated. We can see that we are able to generate a sequence of poses that lead from one random pose to another.



Figure 3. Several retrievals from the 3DHP dataset. On the left is the query pose and on the right is the retrieved pose. On top of each pair of images is the distance between the two poses.