Entropic Metric Alignment for Correspondence Problems

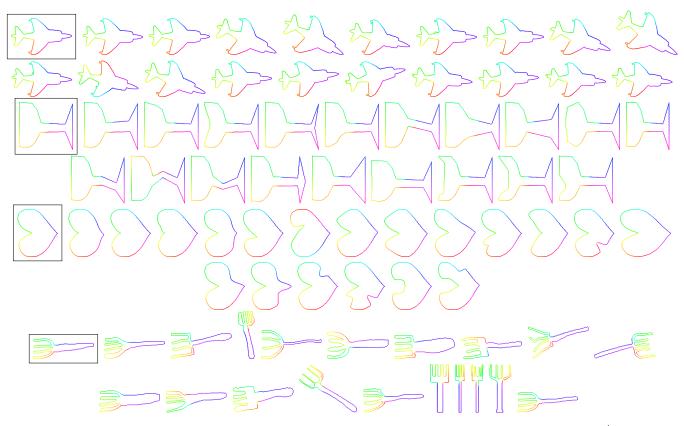


Figure 1: 2D shape matching; color on the boxed model is transferred to the remaining models ($\alpha \equiv 7.5 \times 10^{-4}$).

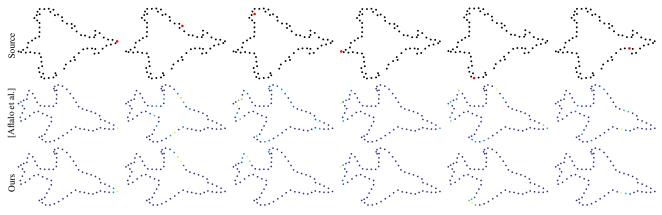


Figure 2: Comparison to [Aflalo et al. 2015]. Here, we compute a map between 2D airplane shapes (data from [Thakoor et al. 2007]), using Euclidean distances in \mathbf{D}_0 and \mathbf{D} . The first row shows points marked on the source shape, and the second row shows their mapped targets using their method (top) and ours (bottom). GW_{α} successfully recovers a near-bijective map, while [Aflalo et al. 2015] superposes some but not all symmetries (compare columns 2 and 5).

References

AFLALO, Y., BRONSTEIN, A., AND KIMMEL, R. 2015. On convex relaxation of graph isomorphism. *Proc. National Academy of Sci.* 112, 10, 2942–2947.

THAKOOR, N., GAO, J., AND JUNG, S. 2007. Hidden Markov model-based weighted likelihood discriminant for 2-D shape classification. *Trans. Image Proc.* 16, 11, 2707–2719.