Crossing Nets: Combining GANs and VAEs with a shared latent space for Hand Pose Estimation

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1 Motivation

- Annotation is expensive
- Synthesized samples are not realistic
- Unlabeled data is cheap to collect
- Recent powerful deep generative models

3 Method

4 Quantitative results

5 Qualitative results

6 Conclusion

7 Contacts

- Extend GAN to semi-supervised setting for real valued structured prediction
- Synthesize highly realistic depth maps given hand pose
- A multi-task setting for pose estimation to regularize the pose regressor

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- Source code and pretrained model available: github.com/melonwan/crossingNet