
license CC4.0 python 2.7 ## UNIT: Unsupervised Image-to-image Translation Networks

New implementation available at imaginaire repository

We have a reimplementation of the UNIT method that is more performant. It is available at Imaginaire

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Code usage

- Please check out our tutorial.
- For multimodal (or many-to-many) image translation, please check out our new work on MUNIT.

What's new.

- 05-02-2018: We now adapt MUNIT code structure. For reproducing experiment results in the NIPS paper, please check out version_02 branch.
- 12-21-2017: Release pre-trained synthia-to-cityscape image translation model. See USAGE.md for usage examples.
- 12-14-2017: Added multi-scale discriminators described in the pix2pixHD paper. To use it simply make the name of the discriminator COCOMsDis.

Paper

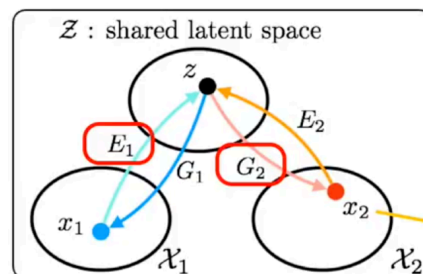
Ming-Yu Liu, Thomas Breuel, Jan Kautz, "Unsupervised Image-to-Image Translation Networks" NIPS 2017 Spotlight, arXiv:1703.00848 2017



Two Minute Paper Summary

(We thank the Two Minute Papers channel for summarizing our work.)

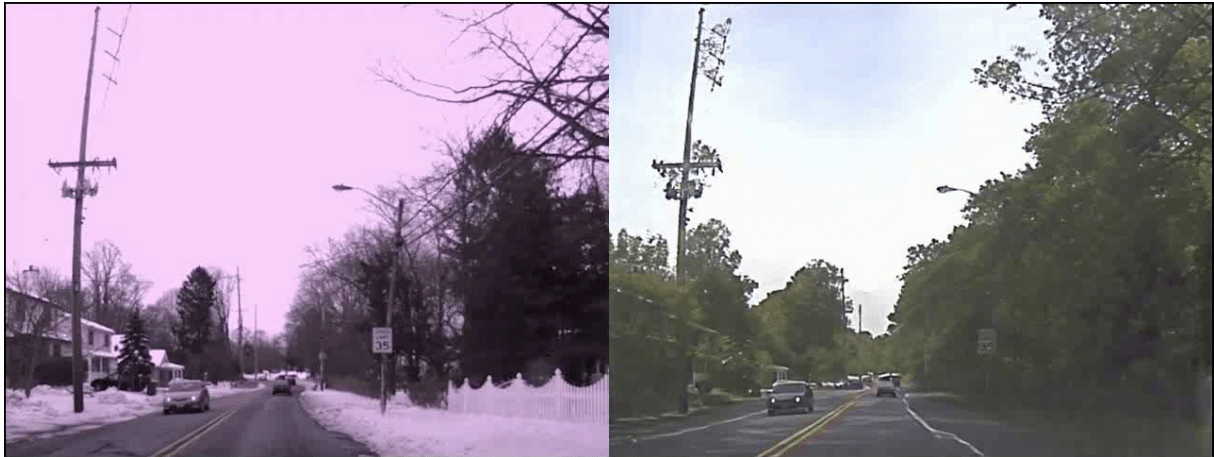
Our assumption: Shared Latent Space



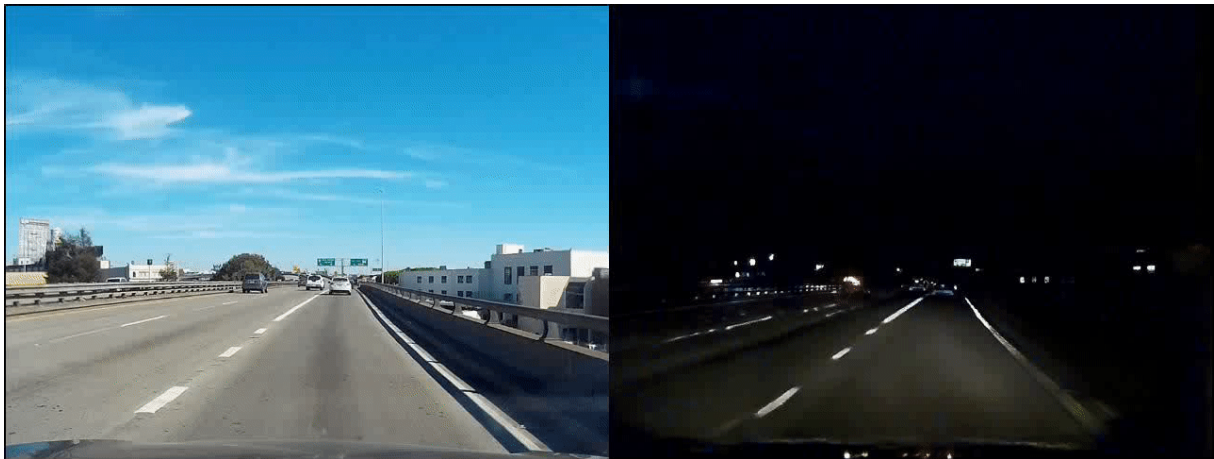
The Shared Latent Space Assumption

Result Videos More image results are available in the Google Photo Album.

Left: input. Right: neural network generated. Resolution: 640x480



Left: input. Right: neural network generated. Resolution: 640x480



Corgi to German Shepherd

Left: Input, Right: Output

Cat to Cheetah

Left: Input, Right: Output

- Snowy2Summery-01
- Snowy2Summery-02
- Day2Night-01
- Day2Night-02
- Translation Between 5 dog breeds
- Translation Between 6 cat species

Street Scene Image Translation From the first row to the fourth row, we show example results on day to night, sunny to rainy, summery to snowy, and real to synthetic image translation (two directions).

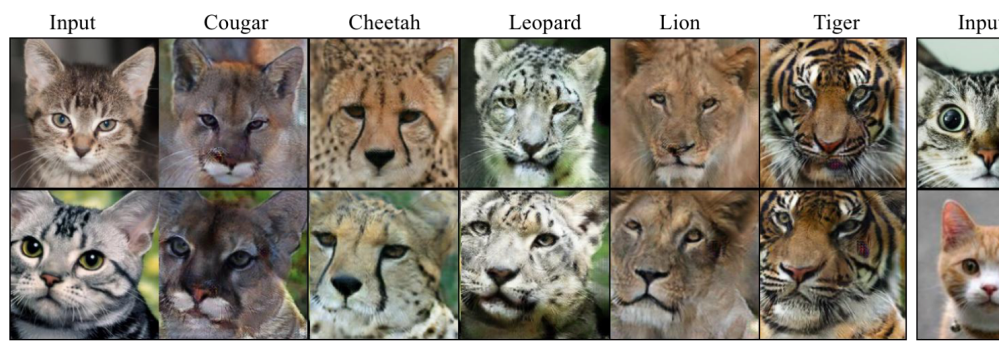
For each image pair, *left is the input image*; **right is the machine generated image**.



Dog Breed Image Translation



Cat Species Image Translation



Attribute-based Face Image Translation

