Deep Supervised Image Retargeting: Implementation Code

Codes

- **Full submission code (training + evaluation).** The complete implementation is provided on GitHub (see AliSaraeb1/deep-supervised-image-retargeting).
  In the file `deep_supervised_image_retargeting.ipynb`, there is a detailed explanation of the method and implementation details.
- **OSC quick test (pretrained only, $\approx$ 3 minutes).** In addition, we provide the code `mrgan_run_pretrained.py` (see `/fs/scratch/PAS3162/Saraeb.1` in OSC) that only loads pretrained checkpoints (no training), evaluates them on TIReD, prints metrics, and saves a small set of example outputs.

Testing on OSC

On OSC in `/fs/scratch/PAS3162/Saraeb.1`, you can find the code `mrgan_run_pretrained.py`, the sbatch file `mrgan_run_pretrained.sbatch`, and the best checkpoints `mrgan_no_Lm_tv_best3.pth` and `mrgan_tired_best.pth`.

Moreover, the TIReD dataset is avaiable on OSC here `/fs/scratch/PAS3162/TIReD`. The outputs are automatically saved here `mrgan_run.42527050.out` and generated images are here `/fs/scratch/PAS3162/Saraeb.1/mrgan_examples/`.

How to run

Outups are already available on OSC. To run the pretrained model code again, simply open a terminal on OSC. Then `cd /fs/scratch/PAS3162/Saraeb.1`. Then submit the job `sbatch mrgan_run_pretrained.sbatch`. That's it.

About the outputs

For each dataset we report metrics for `in` (input vs. ground truth) and `out` (model output vs. GT). Success is when we improve similarity to the ground truth, i.e. `out` $>$ `in` for PSNR/SSIM/FSIM/VIF.