
GSCNN

This is the official code for:

Gated-SCNN: Gated Shape CNNs for Semantic Segmentation Towaki Takikawa, David Acuna, Varun Jampani, Sanja Fidler

ICCV 2019 [Paper] [Project Page]



Based on based on <https://github.com/NVIDIA/semantic-segmentation>.

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```

Usage

Clone this repo

```
1 git clone https://github.com/nv-tlabs/GSCNN
2 cd GSCNN
```

Python requirements Currently, the code supports Python 3 * numpy * PyTorch (>=1.1.0) * torchvision * scipy * scikit-image * tensorboardX * tqdm * torch-encoding * opencv * PyYAML

Download pretrained models Download the pretrained model from the Google Drive Folder, and save it in 'checkpoints/'

Download inferred images Download (if needed) the inferred images from the Google Drive Folder

Evaluation (Cityscapes)

```
1 python train.py --evaluate --snapshot checkpoints/
  best_cityscapes_checkpoint.pth
```

Training A note on training- we train on 8 NVIDIA GPUs, and as such, training will be an issue with WiderResNet38 if you try to train on a single GPU.

If you use this code, please cite:

```
1 @article{takikawa2019gated,  
2   title={Gated-SCNN: Gated Shape CNNs for Semantic Segmentation},  
3   author={Takikawa, Towaki and Acuna, David and Jampani, Varun and  
4     Fidler, Sanja},  
5   journal={ICCV},  
6   year={2019}  
7 }
```