

Quick test

Run `demo_compute_semantic_flow` in MATLAB

Modifying the code

-- You can edit `demo_compute_semantic_flow.m` to include the paths to the data and where you want to store results.

-- The current version assumes that the semantic segmentation and initial optical flow have been computed.

-- If you want to use your own segmentation, the semantic classes are the following:

| | | | |
|----|------------|----|-----------|
| 0 | background | 11 | floor |
| 1 | aeroplane | 12 | grass |
| 2 | bicycle | 13 | horse |
| 3 | bird | 14 | motorbike |
| 4 | boat | 15 | road |
| 5 | building | 16 | sheep |
| 6 | bus | 17 | sidewalk |
| 7 | car | 18 | sky |
| 8 | cat | 19 | train |
| 9 | cow | 20 | water |
| 10 | dog | 21 | person |

Compile mex file

If the mex files are not available in `layer_code\mex\compiled` for your machine, please run `make_mex`. The code is provided as is and we are not responsible for compiling the code to run on your machine.

Note

The accuracy of the provided code is 0.3 superior to the reported in the paper. If you need the exact code or flow files from the paper, please contact us.

Contact

Issues, comments and questions, please contact Laura Sevilla (laura.sevilla@tuebingen.mpg.de) or Deqing Sun (deqings@nvidia.com).

Any scientific work that makes use of our code should appropriately mention this in the text and cite our CVPR paper (see below).

References

Sevilla-Lara, L., Sun, D., Jampani, V., Black, M. J. "Optical Flow with Semantic Segmentation and Localized Layers". In IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), June 2016.

@inproceedings{sevilla:CVPR:2016,
title = {Optical Flow with Semantic Segmentation and Localized Layers},

```
author = {Sevilla-Lara, Laura and Sun, Deqing and Jampani, Varun and Black, Michael J.},  
booktitle = { IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)},  
month = jun,  
year = {2016}  
}
```