This version of the software is only for private, research/educational use and must not be re-distributed or shared. Please contact me (dqsun@seas.harvard.edu; deqing.sun@gmail.com) if you want to use any part of the code for commercial purposes. The code is provided as is. Please contact me if you find any bug in the code, but I am not responsible for compiling the code for you.

Any scientific work that makes use of our code should appropriately mention this in the text and cite our CVPR 2015 paper (see below).

For demo run

demo_middlebury_data
demo_ECCV2014_data
demo_RGBD_tracking_data

Expected output for demo_middlebury_data

```
cones
Classic+NLP
2.79    0.20    0.91    (rms aae aepe)
layer number 2  2 1.985 minutes passed
0.11    0.13    0.11    (rms aae aepe)
```

If the mex files do not work, please go to the mex folder and compile in Matlab:

```
mex imwarp_adjoint_operator.cpp
```

Acknowledgements

Thanks to

- Mr. Michael Single from University of Bern for pointing out a bug about path convention that does not work in Mac OS and for suggesting the following fix

  Before

  ```
  paths.data = 'data\middlebury'; % buggy for us x
  ```

  After

  ```
  paths.data = fullfile('data', 'middleburry');
  ```


References

[1] D. Sun, E. B. Sudderth, and H. Pfister "Layered RGBD Scene Flow Estimation" CVPR 2015

[2] D. Sun, S. Roth, and M. J. Black "A Quantitative Analysis of Current Practices in Optical Flow Estimation and The Principles Behind Them" IJCV, 2014

[3] D. Sun, E. B. Sudderth, and M. J. Black “Layered Image Motion with Explicit Occlusions, Temporal Consistency, and Depth Ordering” NIPS 2010