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](mailto:dqsun@seas.harvard.edu); [deqing.sun@gmail.com](mailto: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