The code is for paper: Discriminative Transfer Feature and Label Consistency for Cross-Domain Image Classification

1. The data folder has all the datasets used in this paper: CMU-PIE, ImageNet+VOC2007, Office+Caltech10\_DeCAF6, Office+Caltech10\_SURF and Office-31\_DeCAF7.

2. The folder code\_TABLE\_II\_III\_IV\_V\_VI\_VII has all the codes for Table II~Table VII in our paper. To be specific, you can obtain the results of DTLC on dataset CMU-PIE, Office31\_DeCAF7, Office+Caltech10\_DeCAF6, Office+Caltech10\_SURF and Imagenet+VOC2007 by running table2\_run\_CMUPIE.m, table3\_table7\_run\_Office31\_DeCAF7.m, table4\_table7\_run\_OfficeCaltech10\_DeCAF6.m table5\_run\_OfficeCaltech10\_SURF.m and table6\_run\_ImagenetVOC2007.m, respectively.

3. The folder Fig4\_tsne is for t-SNE visualization of source and target data for task C07-C29 of CMU-PIE. For example, in the DTLC\_tsne\_save\_data folder, we can run run\_pie.m to save projected data in the folder of save\_data. Then run tsne\_visualization.m to get the t-SNE visualization of DTLC. This way is fitting for all the other methods. We can also run map\_visual.m to show all the t-SNE visualizations for all the methods in Fig4 of the paper.

4. The folder Fig5\_weight is the code for Fig. 5 in our paper. Run Fig5\_run\_decaf6.m in the folder DTLC\_fig5\_weight\_code to produce the accuracy of every 1/3 target data with different weight value from small to large.

5. The folder Fig6\_JDA\_DT\_DTLC is for Fig.6 in our paper: results of JDA, DTLC w/o label consistency and DTLC. The folders JDAcode, DTLC\_wo\_LC and DTLCcode are for methods JDA, DTLC w/o label consistency and DTLC, respectively.

6. The folder Fig7\_DTLC\_iteration is for Fig. 7 to illustrate the iterative optimization process in DTLC for 10 iterations. The folder DICDcode is the code of method DICD.

7. The folder Fig8\_DTLC\_parameter\_sensitivity is for Fig. 8: parameter sensitivity studies w.r.t. \alpha, \beta and \eta, respectively. We can run run\_DATASET\_alpha.m, run\_ DATASET \_beta.m, and run\_ DATASET\_eta.m to test the parameter sensitivity of \alpha, \beta and \eta to DTLC.

8. The folder TABLEVIII is for Table VIII in our paper. Folder DTLC\_wo\_LC\_code is the code of DTLC without LC. Run run\_Office31\_DeCAF7.m to get the results.

9. The folder TABLEIX\_DTLC\_Variants is for Table IX in our paper to compare the results of DTLC and its variants. Folder DTLCcode\_random is the code of DTLC-random, and folder JDAcode\_LC is the code of JDA-LC. We can run run\_DATASET.m to get the results of each method.