Supplementary Materials

Anonymous ECCV submission

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In this supplementary material, we will show more explanations, details, and results that are not included in the main paper.

1 Experiment Details

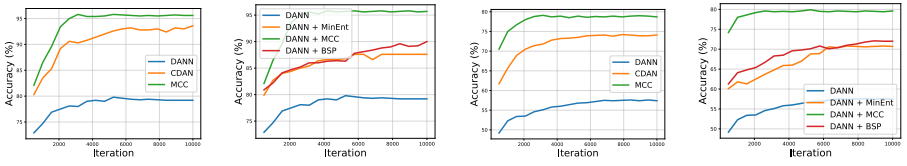
As mentioned in the main paper, we use ResNet-50 and ResNet-101 as the network backbone for fair comparison with previous work. We follow the standard protocols for unsupervised domain adaptation and training techniques (such as learning rate decay strategies) as the public code of DANN, CDAN and AFN.

Further, in MTDA, MSDA, MSPDA and MTPDA, MCC simply combines the source and target domains, that is, the domain labels are *abandoned* when training MCC (consider different source/target domains as one domain). However, for DADA, DCTN, and M^{3}SDA, domain labels are *used* in training (consider different source/target domains as different domains).

2 Supplementary Results

2.1 Accuracy Curves

In the main paper, the accuracy curves of task A→W in Office-31 were reported. Here, we further present the accuracy curves of more tasks and datasets. The accuracy curves of task A→D in Office-31 and Visda-2017 in UDA are shown in Figure 1 respectively. Consistent with the results in the main paper, MCC enjoys higher accuracy and convergence speed.

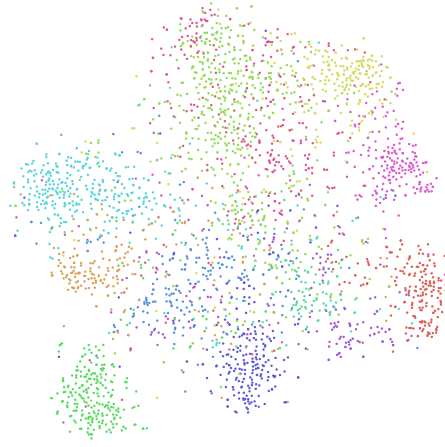


(a) A→D (b) A→D(regularizer) (c) Visda (d) Visda(regularizer)

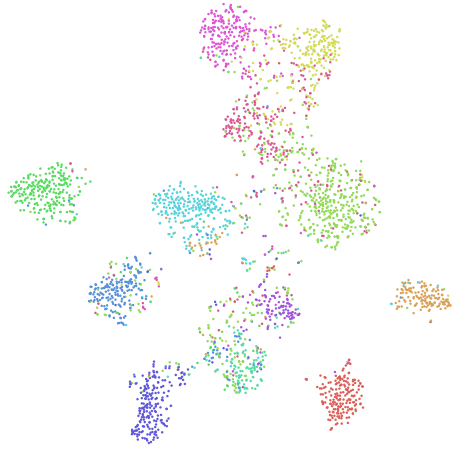
Fig. 1. Accuracy Curves on Office-31 and Visda-2017

2.2 Feature Visualization

In the main paper, the feature visualization results in Partial Domain Adaptation were reported. Here, we further include the results in UDA to keep consistent with the previous works. The feature visualization results in the target domains on Visda-2017 are shown in Figure 2, which implies that MCC has clearer and sharper class boundaries on target features.



(a) MinEnt

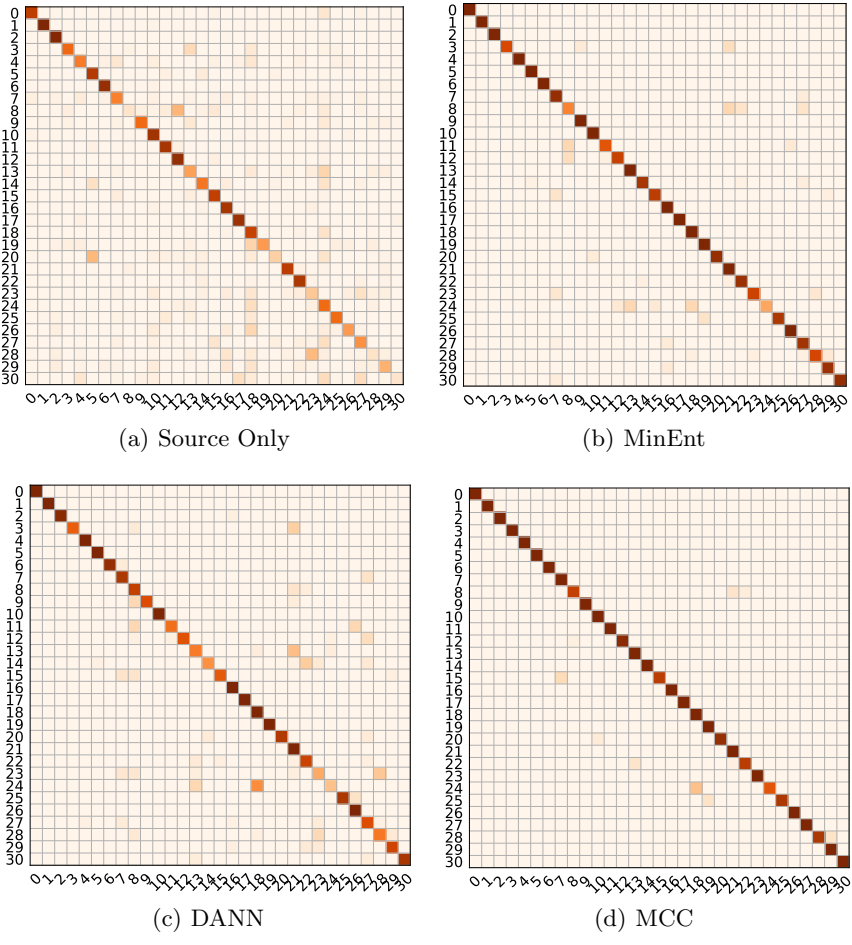


(b) MCC

Fig. 2. t-SNE visualization of features in the bottleneck layer in UDA on Visda-2017.

2.3 Error Matrices

Due to space limitations, we only show the error matrices on Visda-2017 in the main paper. Here, we further report the error matrices on Office-31, with more classes (31 categories) in Figure 3. From the error matrices, we can observe that DANN and MinEnt can outperform the model trained only on the source domain, while MCC performs best among them.



(a) Source Only (b) MinEnt

(c) DANN (d) MCC

Fig. 3. Error Matrices in UDA on Office-31 in task A→D.