

Principles of Data Science Project 4

Domain Adaptation

Hongzhou Liu
517030910214

deanlh@sjtu.edu.cn

Xuanrui Hong
517030910227

hongxuanrui.1999@sjtu.edu.cn

Qilin Chen
517030910155

1017856853@sjtu.edu.cn

Abstract—In this project, we tried different domain adaptation methods on the Office-Home dataset, which contains 65 categories of things from 4 domains. The four domains are Art, Clipart, Product and Real-World. In our experiments, we take Art, Clipart and Product as source domains and Real-World as target domain. For traditional methods, we tried KMM, CORAL, GFK, TCA, EasyTL and BDA. For deep learning methods, we only tried DAN due to the scarce of computation resources and time limitation. We compared performances among those methods and discussed the difference among them.

Index Terms—Domain Adaptation, Transfer Learning

I. INTRODUCTION

[1]

REFERENCES

- [1] D. G. Lowe, "Object recognition from local scale-invariant features," in *Proceedings of the seventh IEEE international conference on computer vision*, vol. 2. Ieee, 1999, pp. 1150–1157.