# 论文

## Survey

1. Transferability in Deep Learning: A Survey

## Domain Adaptation

1. Domain Adaptation via Transfer Component Analysis(TCA)
2. Unsupervised Domain Adaptation by Backpropagation, ICML 2015
3. Conditional Adversarial Domain Adaptation, NeurIPS 2018
4. Maximum Classifier Discrepancy for Unsupervised Domain Adaptation, CVPR 2018
5. Bridging Theory and Algorithm for Domain Adaptation, ICML 2019
6. Transferability vs. Discriminability: Batch Spectral Penalization for Adversarial Domain Adaptation, ICML 2019
7. Representation Subspace Distance for Domain Adaptation Regression, ICML 2021
8. Deep CORAL: Correlation Alignment for Deep Domain Adaptation

## Task Adaptation

1. Explicit inductive bias for transfer learning with convolutional networks, ICML 2018
2. Delta: Deep learning transfer using feature map with attention for convolutional networks, ICLR 2019
3. Catastrophic Forgetting Meets Negative Transfer: Batch Spectral Shrinkage for Safe Transfer Learning, NeurIPS 2019
4. Co-Tuning for Transfer Learning, NeurIPS 2020
5. Self-Tuning for Data-Efficient Deep Learning, ICML 2021
6. Debiased Self-Training for Semi-Supervised Learning, NeurIPS 2022

# 代码库

1. 清华大学龙明盛老师组代码库（推荐）
   thuml/Transfer-Learning-Library: Transfer Learning Library for Domain Adaptation, Task Adaptation, and Domain Generalization (github.com)
2. 王晋东迁移学习代码库
   jindongwang/transferlearning: Transfer learning / domain adaptation / domain generalization / multi-task learning etc. Papers, codes, datasets, applications, tutorials.-迁移学习 (github.com)

# 教程

1. 知乎 江广俊
   https://www.zhihu.com/people/JunguangJiang/posts
2. 知乎 王晋东不在家(科普类)
   https://www.zhihu.com/people/jindongwang
3. 教程 《迁移学习简明手册》作者：王晋东(综述科普类)
   https://pan.baidu.com/s/1FxxAV4GhH-rS82eRkyxXNg
   提取码: cs7s

# 陈新阳老师

新阳老师目前研究是偏 ML 方向，（他自己说他是哈深目前唯一一个 ML 学者 hhh），主要研究方向是 **Domain Adaptation(DA)**，博士是在清华大学龙明盛老师组，他们组的论文都很硬核，需要非常强的数学基础。

但是目前基于 convariate shift 的 DA 理论已经比较完善(或者说饱和了)，所以他目前研究的方向主要为 DA 和 CV/时序具体任务的结合（NLP 很多任务没啥前景了 hhh），多任务迁移学习等。