

Jian Liang

Homepage: liangjian.xyz

Github: github.com/tim-learn

Email: liangjian92@gmail.com

Mobile: +86-130-5168-7640

EXPERIENCE

- **Associate Professor, Institute of Automation, Chinese Academy of Sciences** Beijing, China
working with Prof. Ran He and Prof. Tieniu Tan
research interests: transfer learning; federated learning; out-of-distribution generalization
June 2021 - now
- **Research Fellow, National University of Singapore** Singapore
working with Prof. Jiashi Feng
research interests: transfer learning; visual domain adaptation
June 2019 - April 2021

EDUCATION

- **Ph.D., University of the Chinese Academy of Sciences** Beijing, China
Pattern Recognition and Intelligent Systems; Advisor: Prof. Tieniu Tan
Thesis: Multi-domain learning and its applications in retrieval, clustering, and classification
July 2013 - Jan. 2019
- **B.Eng., Xi'an Jiaotong University** Shaanxi, China
Automation; Thesis Advisor: Prof. Sibó Ge
July 2009 - June 2013

SELECTED PUBLICATIONS

† *corresponding authors*; * *co-first authors*

- **Jian Liang**, Dapeng Hu, Yunbo Wang, Ran He, and Jiashi Feng. "Source data-absent unsupervised domain adaptation through hypothesis transfer and labeling transfer." *IEEE Transactions on Pattern Analysis and Machine Intelligence* (2021).
- **Jian Liang**, Ran He, Zhenan Sun, and Tieniu Tan. "Aggregating randomized clustering-promoting invariant projections for domain adaptation." *IEEE Transactions on Pattern Analysis and Machine Intelligence* 41, no. 5 (2018): 1027-1042.
- **Jian Liang**, Dapeng Hu, and Jiashi Feng. "Do we really need to access the source data? source hypothesis transfer for unsupervised domain adaptation." In *Proc. ICML*, 2020.
- Mi Luo, Fei Chen, Dapeng Hu, Yifan Zhang, **Jian Liang**[†], and Jiashi Feng[†]. "No fear of heterogeneity: Classifier calibration for federated learning with non-iid data." In *Proc. NeurIPS*, 2021.
- **Jian Liang**, Dapeng Hu, Jiashi Feng and Ran He. "DINE: Domain Adaptation from Single and Multiple Black-box Predictors." In *Proc. CVPR*, 2022.
- **Jian Liang**, Dapeng Hu, and Jiashi Feng. "Domain adaptation with auxiliary target domain-oriented classifier." In *Proc. CVPR*, 2021.
- **Jian Liang**, Ran He, Zhenan Sun, and Tieniu Tan. "Distant supervised centroid shift: A simple and efficient approach to visual domain adaptation." In *Proc. CVPR*, 2019.
- Lingxiao He*, **Jian Liang***, Haiqing Li, and Zhenan Sun. "Deep spatial feature reconstruction for partial person re-identification: Alignment-free approach." In *Proc. CVPR*, 2018.
- **Jian Liang***, Zhihang Li*, Dong Cao, Ran He, and Jingdong Wang. "Self-paced cross-modal subspace matching." In *Proc. SIGIR*, 2016.
- **Jian Liang**, Ran He, Zhenan Sun, and Tieniu Tan. "Group-Invariant Cross-Modal Subspace Learning." In *Proc. IJCAI*, 2016.
- **Jian Liang**, Yunbo Wang, Dapeng Hu, Ran He, and Jiashi Feng. "A balanced and uncertainty-aware approach for partial domain adaptation." In *Proc. ECCV*, 2020.
- Dapeng Hu, **Jian Liang**[†], Qibin Hou, Hanshu Yan, and Yunpeng Chen. "Adversarial Domain Adaptation With Prototype-Based Normalized Output Conditioner." *IEEE Transactions on Image Processing* 30 (2021): 9359-9371.
- **Jian Liang**, Ran He, Zhenan Sun, and Tieniu Tan. "Exploring uncertainty in pseudo-label guided unsupervised domain adaptation." *Pattern Recognition* 96 (2019): 106996.
- Yafeng Zhan*, Jianze Wei*, **Jian Liang**, Xiu Xu, Ran He, Trevor W. Robbins, and Zheng Wang. "Diagnostic classification for human autism and obsessive-compulsive disorder based on machine learning from a primate genetic model." *American Journal of Psychiatry* 178, no. 1 (2021): 65-76.
- Yunbo Wang, **Jian Liang**, Dong Cao, and Zhenan Sun. "Local semantic-aware deep hashing with Hamming-isometric quantization." *IEEE Transactions on Image Processing* 28, no. 6 (2018): 2665-2679.

SELECTED WORK IN PROGRESS

- Jiyang Guan, **Jian Liang**, and Ran He. “Are You Stealing My Model? Sample Correlation for Fingerprinting Deep Neural Networks.” submitted to Proc. xxx, 2022.
- Junchi Yu, **Jian Liang**, and Ran He. “Finding Diverse and Predictable Subgraphs for Graph Domain Generalization.” submitted to Proc. xxx, 2022.
- Yuxi Wang, **Jian Liang**, Zhaoxiang Zhang, Yuran Yang, and Shuqi Mei. “Minimax One-shot Adaptation for Efficient Cross-Domain Semantic Segmentation.” submitted to Proc. xxx, 2022.
- Yujun Shi, Song Bai, **Jian Liang**, Wenqing Zhang, and Vincent Tan. “Towards Understanding and Mitigating Dimensional Collapse in Heterogeneous Federated Learning.” submitted to Proc. xxx, 2022.
- Boqiang Xu, **Jian Liang**[†], Lingxiao He, and Zhenan Sun. “META: Mimicking Embedding via oThers’ Aggregation for Generalizable Person Re-identification.” submitted to Proc. ECCV, 2022.
- Yuxi Wang, **Jian Liang**, and Zhaoxiang Zhang. “Source Data-Free Cross-Domain Semantic Segmentation: Align, Teach and Propagate.” submitted to IEEE Transactions on Pattern Analysis and Machine Intelligence, under review, 2022.
- Yuhe Ding, Lijun Sheng, **Jian Liang**[†], Aihua Zheng, and Ran He. “ProxyMix: Proxy-based Mixup Training with Label Refinery for Source-Free Domain Adaptation.” submitted to IEEE Transactions on Image Processing, under review, 2022.
- Boqiang Xu, Lingxiao He, **Jian Liang**[†], and Zhenan Sun. “Learning Feature Recovery Transformer for Occluded Person Re-identification.” submitted to IEEE Transactions on Image Processing, major revision, 2022.

HONORS AND AWARDS

- Beijing Nova Program 2021
- Chinese Academy of Sciences Special Research Assistant Program 2021
- Chinese Academy of Sciences Excellent Doctoral Thesis Award 2020
- Chinese Academy of Sciences Presidential Scholarship 2018
- IJCAI-ECAI Distinguished PC Awards 2018
- IEEE ISM Conference Best Paper Candidate Award 2016

TEACHING

- **Instructor, Graduate Course 081104M07006H** Beijing, China
“Deep Learning and Its Applications in Computer Vision and Natural Language Processing” July 2021 - Aug 2021
@ University of the Chinese Academy of Sciences (UCAS)
- **Instructor, Graduate Course 081104M07006H** Beijing, China
“Deep Learning and Its Applications in Computer Vision and Natural Language Processing” June 2022 - July 2022
@ University of the Chinese Academy of Sciences (UCAS)

ACADEMIC SERVICES

- **Reviewer for Top-tier Journals**
IEEE TPAMI, IEEE TIP, IEEE TIFS, IEEE TNNLS, IEEE TCSVT, Patteren Recognition, Neural Networks, ...
- **Program Committee for Top-tier Conferences**
ICML, ICLR, NeurIPS, CVPR, ICCV, ECCV, AAAI, IJCAI, ...