

WEIJIAN DENG

Personal Webpage: <http://weijiandeng.xyz> ◊ [Google Scholar](#)

Email: weijian.deng@anu.edu.au ◊ Research Fellow at Australian National University

Out-of-distribution Generalization ◊ Unsupervised Model Evaluation ◊ Domain Adaptation

EDUCATION

Australian National University, Australia *Jul 2019 - Jan 2023*

Research Topic: Model Generalization Under Distribution Shift

Supervisors: Dr. Liang Zheng, Dr. Yumin Suh, Prof. Stephen Gould

University of Chinese Academy of Sciences, China *Sep 2016 - Jun 2019*

Master of Science in Computer Science

Research Topic: Object Recognition

Supervisor: Prof. Jianbin Jiao

Beijing Jiaotong University, China *Sep 2012 - Jun 2016*

Bachelor of Engineering

Overall GPA: 92.3/100

WORK EXPERIENCE

NEC Laboratories America, INC. *Jun 2020 - Sep 2020*

Research Intern (Remote) on Multi-task Learning

Hosted by Dr. Yu Xiang and Dr. Yumin Suh

Singapore University of Technology and Design *Aug 2019 - Nov 2019*

Research Assistant on Domain Adaptation

Hosted by Dr. Liang Zheng

AWARDS

NeurIPS 2022 Scholar Award, 2022

ICML 2022 Top 10% Reviewer, 2022

ECCV 2020 Outstanding Reviewer, 2022

Australian Government Research Training Program (AGRTP) Scholarship, 2019-2023

The Third Place in Vehicle Re-identification track of CVPR 2019 AI-City Challenge, 2019

China National Scholarship (Master), 2018

China National Scholarship (Bachelor), 2014, 2015

Merit Student, University of Chinese Academy of Sciences, 2018

Outstanding Graduates of Beijing, 2016

Merit Student of Beijing, 2015

Merit Student, Beijing Jiaotong University, 2013-2015

First-class Scholarship at Beijing Jiaotong University, 2014-2015

Second-class Scholarship at Beijing Jiaotong University, 2013

PROFESSIONAL SERVICE

Co-organizer: CVPR'22 Tutorial on Evaluating Models Beyond the Textbook: Out-of-distribution and Without Labels (<https://sites.google.com/view/evalmodel>)

Co-organizer: ECCV'20 Visual Domain Adaptation Challenge (<http://ai.bu.edu/visda-2020>)

Conference Reviewer: NeurIPS'22; ICML'22-23; ICLR'22-23; ICCV'21; CVPR'21-23; ECCV'20;

Journal Reviewer: IEEE-TPAMI; IEEE-TIP;

PUBLICATIONS

Model Generalization Prediction (PhD Research)

[1] AutoEval: Are Labels Always Necessary for Classifier Accuracy Evaluation?

Weijian Deng and Liang Zheng

IEEE Transactions on Pattern Analysis and Machine Intelligence (**TPAMI**), 2022

[2] Are Labels Always Necessary for Classifier Accuracy Evaluation?

Weijian Deng and Liang Zheng

IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**), 2021

[3] On the Strong Correlation Between Model Invariance and Generalization

Weijian Deng, Stephen Gould, and Liang Zheng

Neural Information Processing Systems (**NeurIPS**), 2022

[4] What Does Rotation Prediction Tell Us about Classifier Accuracy under Varying Testing Environments?

Weijian Deng, Stephen Gould, and Liang Zheng

International Conference on Machine Learning (**ICML**), 2021

[5] Confidence and Dispersity Speak: Characterising Prediction Matrix for Unsupervised Accuracy Estimation

Weijian Deng, Yumin Suh, Stephen Gould, Liang Zheng

arXiv preprint, arXiv:2302.01094

Domain Adaptation

[6] Rethinking Triplet Loss for Domain Adaptation

Weijian Deng, Liang Zheng, Yifan Sun, and Jianbin Jiao

IEEE Transactions on Circuits and Systems for Video Technology (**TCSVT**), 2020

[7] Image-Image Domain Adaptation with Preserved Self-Similarity and Domain-Dissimilarity for Person Re-identification

Weijian Deng, Liang Zheng, Qixiang Ye, Guoliang Kang, Yi Yang, and Jianbin Jiao

IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**), 2018

[8] Similarity-preserving Image-Image Domain Adaptation for Person Re-Identification

Weijian Deng, Liang Zheng, Qixiang Ye, Yi Yang, and Jianbin Jiao

arXiv preprint arXiv:1811.10551

[9] Domain alignment with triplets

Weijian Deng, Liang Zheng, and Jianbin Jiao

arXiv preprint arXiv:1812.00893

Object Recognition

[10] Fine-grained Classification via Categorical Memory Networks

Weijian Deng, Joshua Marsh, Stephen Gould, and Liang Zheng

IEEE Transactions on Image Processing (**TIP**),

[11] Split to Learn: Gradient Split for Multi-Task Human Image Analysis

Weijian Deng, Yumin Suh, Xiang Yu, Masoud Faraki, Liang Zheng, Manmohan Chandraker

IEEE/CVF Winter Conference on Applications of Computer Vision (**WACV**), 2023

[12] SVDNet for Pedestrian Retrieval

Yifan Sun, Liang Zheng, **Weijian Deng**, Shengjin Wang

IEEE/CVF International Conference on Computer Vision (**ICCV**), 2017