ZHEDONG ZHENG

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Email: zdzheng12@gmail.com • Date of Birth: 1993.10

EDUCATION AND RESEARCH EXPERIENCE

University of Technology Sydney, Sydney, Australia   2017 - 2021
Ph.D Student (Advisors: Prof. Yi Yang and Dr. Liang Zheng)
Baidu Research, Beijing, China   2020
Remote Research Intern (Hosts: Mr. Minyue Jiang and Dr. Xiao Tan)
Nvidia Research, San Jose, United States   2018
Research Intern (Hosts: Dr. Xiaodong Yang, Dr. Zhiding Yu and Dr. Jan Kautz)
Fudan University, Shanghai, China   2012 - 2016
B.S. in Computer Science (Advisor: Prof. Xiangyang Xue)

RESEARCH INTEREST

Computer Vision and Machine Learning
Image Retrieval, Target Re-identification, Image-text Understanding
Image Generation, Domain Adaptation, Adversarial Samples

PUBLICATIONS

1. Unlabeled Samples Generated by GAN Improve the Person Re-identification Baseline in vitro.
IEEE International Conference on Computer Vision (**ICCV**), 2017. (Spotlight)
Zhedong Zheng, Liang Zheng, Yi Yang (**Cited by 1000+ times**)

2. Joint Discriminative and Generative Learning for Person Re-identification.
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2019. (Oral)
Zhedong Zheng, Xiaodong Yang, Zhiding Yu, Liang Zheng, Yi Yang, Jan Kautz

3. Unsupervised Scene Adaptation with Memory Regularization in vivo.
International Joint Conference on Artificial Intelligence (**IJCAI**), 2020.
Zhedong Zheng, Yi Yang

4. University-1652: A Multi-view Multi-source Benchmark for Drone-based Geo-localization.
ACM Multimedia (**ACM MM**), 2020.
Zhedong Zheng, Yunchao Wei, Yi Yang

5. Rectifying Pseudo Label Learning via Uncertainty Estimation for Domain Adaptive Semantic Segmentation.
International Journal of Computer Vision (**IJCV**), 2020.
Zhedong Zheng, Yi Yang

6. A Discriminatively Learned CNN Embedding for Person Re-identification.
ACM Transactions on Multimedia Computing, Communications, and Applications (**TOMM**), 2018.
Zhedong Zheng, Liang Zheng, Yi Yang (**ESI Highly Cited Paper**)

7. Pedestrian Alignment Network for Large-scale Person Re-identification.
IEEE Transactions on Circuits and Systems for Video Technology (**TCSVT**), 2019.
Zhedong Zheng, Liang Zheng, Yi Yang (**ESI Highly Cited Paper**)

8. Dual-Path Convolutional Image-Text Embedding with Instance Loss.
ACM Transactions on Multimedia Computing, Communications, and Applications (**TOMM**), 2020.
Zhedong Zheng, Liang Zheng, Michael Garrett, Yi Yang, Mingliang Xu, Yi-Dong Shen

9. VehicleNet: Learning Robust Visual Representation for Vehicle Re-identification.
IEEE Transactions on Multimedia (**TMM**), 2020.
Zhedong Zheng, Tao Ruan, Yunchao Wei, Yi Yang, Mei Tao

10. Going beyond real data: A robust visual representation for vehicle re-identification
IEEE Conference on Computer Vision and Pattern Recognition Workshop (**CVPR Workshop**), 2020
Zhedong Zheng, Minyue Jiang, Zhigang Wang, Jian Wang, Zechen Bai, Xuanmeng Zhang, Xin Yu, Xiao Tan, Yi Yang, Shilei Wen and Errui Ding (**Challenge Winner**)

11. Real-World Automatic Makeup via Identity Preservation Makeup Net.
International Joint Conference on Artificial Intelligence (**IJCAI**), 2020.
Zhikun Huang, **Zhedong Zheng**, Chenggang Yan, Hongtao Xie, Yaoqi Sun, Jianzhong Wang, Jiyong Zhang

12. Decoupled and Memory-Reinforced Networks: Towards Effective Feature Learning for One-Step Person Search.
The AAAI Conference on Artificial Intelligence (**AAAI**), 2021.
Chuchu Han, **Zhedong Zheng**, Changxin Gao, Nong Sang, Yi Yang

13. Macro-Micro Adversarial Network for Human Parsing.
European Conference on Computer Vision (**ECCV**), 2018.
Luo Yawei, **Zhedong Zheng**, Liang Zheng, Tao Guan, Junqing Yu, Yi Yang

14. Camera Style Adaptation for Person Re-identification.
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2018.
Zhun Zhong, Liang Zheng, **Zhedong Zheng**, Shaozi Li, Yi Yang

15. Multi-pseudo Regularized Label for Generated Samples in Person Re-Identification.
IEEE Transactions on Image Processing (**TIP**), 2018.
Yan Huang, Jinsong Xu, Qiang Wu, **Zhedong Zheng**, Zhaoxiang Zhang, Jian Zhang

16. Camstyle: a novel data augmentation method for person re-identification.
IEEE Transactions on Image Processing (**TIP**), 2018.
Zhun Zhong, Liang Zheng, **Zhedong Zheng**, Shaozi Li, Yi Yang (**ESI Highly Cited Paper**)

17. Improving Person Re-identification by Attribute and Identity Learning.
Pattern Recognition (**PR**), 2019.
Yutian Lin, Liang Zheng, **Zhedong Zheng**, Yu Wu, Zhilan Hu, Chenggang Yan, Yi Yang (**ESI Highly Cited Paper**)

18. Bayesian query expansion for multi-camera person re-identification.
Pattern Recognition Letters, 2018.
Yutian Lin, **Zhedong Zheng**, Hong Zhang, Chenqiang Gao, Yi Yang

19. Diagnose like a Radiologist: Attention Guided Convolutional Neural Network for Thorax Disease Classification.
Pattern Recognition Letters, 2020.
Qingji Guan, Yaping Huang, Zhun Zhong, **Zhedong Zheng**, Liang Zheng, Yi Yang

20. Unsupervised Eyeglasses Removal in the Wild.
IEEE Transactions on Cybernetics, 2020.
Bingwen Hu, **Zhedong Zheng**, Ping Liu, Wankou Yang, Mingwu Ren

21. Each Part Matters: Local Patterns Facilitate Cross-view Geo-localization.
IEEE Transactions on Circuits and Systems for Video Technology (**TCSVT**), 2021.
Tingyu Wang, **Zhedong Zheng**, Chenggang Yan, Jiyong Zhang, Yaoqi Sun, Bolun Zheng, Yi Yang

ARXIV PAPERS

1. Query Attack via Opposite-Direction Feature: Towards Robust Image Retrieval.
Zhedong Zheng, Liang Zheng, Yi Yang, Fei Wu

2. Parameter-Efficient Person Re-identification in the 3D Space.
Zhedong Zheng, Yi Yang

3. Adaptive Boosting for Domain Adaptation: Towards Robust Predictions in Scene Segmentation.
Zhedong Zheng, Yi Yang

4. Progressive Local Filter Pruning for Image Retrieval Acceleration.
Xiaodong Wang, **Zhedong Zheng**, Yang He, Fei Yan, Zhiqiang Zeng, Yi Yang

AWARDS & COMPETITIONS

2021 IEEE Circuits and Systems Society Outstanding Young Author Award
AICity Challenge: Language-based Vehicle Retrieval Challenge, Rank 1st / 15 teams, CVPR 2021
AICity Challenge: Vehicle Re-identification Challenge, Rank 2nd / 51 teams, CVPR 2021
Evoked Expressions from Videos (EEV) Challenge, Rank 2nd / 11 teams, CVPR 2021
AICity Challenge: Vehicle Re-identification Challenge, Rank 1st / 64 teams, CVPR 2020
AICity Challenge: Vehicle Re-identification Challenge, Rank 4th / 84 teams, CVPR 2019
VisDA: Semi-Supervised Domain Adaptation Challenge, Rank 4th / 57 teams, ICCV 2019
First-class Scholarship at Fudan University 2013, 2014, 2015, 2016
US Patent Application: Image identification using neural networks 16357047

REVIEW SERVICES

IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)
International Journal of Computer Vision (IJCV)
IEEE Transactions on Image Processing (TIP)
IEEE Transactions on Multimedia (TMM)
IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)
ACM Transactions on Multimedia Computing, Communications, and Applications (TOMM)
Computer Vision and Pattern Recognition (CVPR)
International Conference on Computer Vision (ICCV)
European Conference on Computer Vision (ECCV)
International Joint Conference on Artificial Intelligence (IJCAI)
AAAI Conference on Artificial Intelligence (AAAI)
ACM Multimedia (ACM MM)

OPEN SOURCE

Codes and models for my published papers are available on my GitHub: https://github.com/layumi
(5,700 stars and 1,400 followers)