Liang Zheng

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Research School of Computer Science

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Education and Work Experience

2018.11-	Australian National University	Lecturer
2018.4-2018.11	Singapore University of Technology and Design	Assistant Professor
2016.5-2018.3	University of Technology Sydney	Postdoctoral Research Associate
2015.9-2016.4	University of Texas at San Antonio	Postdoc Researcher
2010.8-2015.7	Tsinghua University	Ph.D. Electronic Engineering
2006.8-2010.7	Tsinghua University	B.S. School of Life Science

Teaching

2018	51.504	Advanced Machine Learning	Graduate course
2018	01.112	Machine Learning	Undergraduate course

Recognition and Honors

The best of the rest from the Physics	MIT Technology Review	2015
arXiv preprint server		
Best Paper Runner Up	PAKDD 2018 workshop	2018
Early Career R & D Award	D2D CRC	2017
Outstanding PhD Thesis	Chinese Association for Artificial Intelligence	2017
Travel Grant Award for Doctoral Consortium	CVPR, ICCV	2015
Stars of Tomorrow	Microsoft Research Asia	2015
Outstanding Graduate	Tsinghua University	2015

Professional Service

Associate Editor Visual Computer Journal

Area Chair ICMR 2019

Session Chair Multimedia Technologies Empowering Retail Experiences, ICME 2019 Tutorial Organizer Representation Learning in Pedestrian Re-identification, ECCV 2018 Tutorial Organizer Person Re-identification: State of the Art and Future Trend, ICPR 2018

Area Chair ICPR 2018

Reviewer TPAMI, IJCV, TIP, TMM, TCSVT, CVPR, ICCV, ECCV, and ACM Multimedia

Selected Research Projects

2018-2019 PI	Hardware constrained adaptive visual analysis platform	IDC	\$94,759
2018-2019 co-PI	Technology exploration and translation for IoT program	ST Engineering	\$100,000
2018-2021 PI	Image-image domain adaptation	SUTD SRG	\$100,000
2017-2018 CI	Large-scale person search with deep learning	UTS	\$15,096.

Selected Publications

As of 27 December 2018, 34 papers have been published in top venues such as TPAMI, IJCV, TIP, ICCV, CVPR and ECCV. Google Scholar Citations = 3,490, H-Index = 27.

Referred Journal Papers

1. Zhedong Zheng, Liang Zheng, and Yi Yang, "Pedestrian alignment network for large-scale person re-identification", IEEE Transactions on Circuits and Systems for Video Technology (TCSVT), 2018,

- accepted.
- 2. Zhun Zhong, Liang Zheng, Zhedong Zheng, Shaozi Li, Yi Yang, "CamStyle: A Novel Data Augmentation Method for Person Re-identification", IEEE Transactions on Image Processing, Vol. 28, Issue 2, pp. 1176-1190, 2019.
- 3. Hehe Fan, **Liang Zheng**, Yi Yang, "Unsupervised Person Re-identification: Clustering and Fine-tuning", ACM Transactions on Multimedia Computing, Communications, and Applications (TOMM), 2018, Vol. 14, Issue 4, pp. 83.
- Jufeng Yang, Xiaoxiao Sun, Yu-Kun Lai, Liang Zheng, Ming-Ming Cheng, "Recognition from Web Data: A Progressive Filtering Approach", IEEE Transactions on Image Processing, Vol. 27, Issue 18, pp. 5303 - 5315, 2018.
- 5. Xuanyi Dong, **Liang Zheng** et al., "Few-Example Object Detection with Model Communication", IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 2018, accepted.
- 6. Liang Zheng et al., "SIFT Meets CNN: A Decade Survey of Instance Retrieval", IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), Vol. 40, Issue 5, pp. 1224-1244, 2018. Highly Cited Paper by Web of Science. Cited 121 times.
- 7. Zhedong Zheng, Liang Zheng, et al., "A Discriminatively Learned CNN Embedding for Person Reidentification", ACM Transactions on Multimedia Computing, Communications, and Applications, Vol. 14, Issue 1, pp. 13, 2018. Highly Cited Paper by Web of Science. Cited 128 times.
- 8. Yuting Hu, **Liang Zheng**, Yi Yang, Yongfeng Huang, "Twitter100k: A Real-world Dataset for Weakly Supervised Cross-Media Retrieval", IEEE Transactions on Multimedia (TMM), 2017, Vol. 20, Issue 4, pp. 927-938, 2018.
- 9. Fuqing Zhu, Xiangwei Kong, **Liang Zheng**, Haiyan Fu, and Qi Tian, "Part-based Deep Hashing for Large-scale Person Re-identification", IEEE Transactions on Image Processing, Vol. 26, Issue 10, pp. 4806 4817, 2017.
- 10. Zhong Zhang, Shuang Liu, Xing Mei, Baihua Xiao, and **Liang Zheng**, "Learning Completed Discriminative Local Features for Texture Classification", Pattern Recognition, Vol. 67, pp. 263-275, 2017.
- 11. Ziqiong Liu, Shengjin Wang, **Liang Zheng**, and Qi Tian, "Robust ImageGraph: Rank-Level Feature Fusion for Image Search", IEEE Transactions on Image Processing, Vol. 26, Issue 7, pp. 3128-3141, 2017.
- 12. **Liang Zheng** et al., "Accurate Image Search with Multi-Scale Contextual Evidences", International Journal of Computer Vision (IJCV), pp. 1-13, 2016.
- 13. **Liang Zheng**, Shengjin Wang, and Qi Tian, "Lep-norm IDF for Scalable Image Retrieval", IEEE Transactions on Image Processing, Vol. 23, Issue 8, pp. 3604-3617, 2014.
- 14. Liang Zheng et al., "Coupled Binary Embedding for Large-scale Image Retrieval", IEEE Transactions on Image Processing, Vol. 23, Issue 8, pp. 3368-3380, 2014. Highly Cited Paper by Web of Science. Cited 112 times.
- 15. **Liang Zheng**, Shengjin Wang, Ziqiong Liu, and Qi Tian, "Fast Image Retrieval: Query Pruning and Early Termination", IEEE Transactions on Multimedia, Vol. 17, Issue 5, pp. 648-659, 2015.

Referred Conference Papers

- 1. Guoliang Kang, **Liang Zheng** et al., "Deep Adversarial Attention Alignment for Unsupervised Domain Adaptation: the Benefit of Target Expectation Maximization", ECCV, pp.420-436, 2018.
- 2. Yifan Sun, **Liang Zheng** et al., "Beyond Part Models: Person Retrieval with Refined Part Pooling (and A Strong Convolutional Baseline)", ECCV, pp. 501-518, 2018. **Used by many companies like NVIDIA**, **Huawei and Megvii**.
- 3. Zhun Zhong, **Liang Zheng** et al., "Generalizing A Person Retrieval Model Hetero- and Homogeneously", ECCV, pp. 176-192, 2018.
- 4. Yawei Luo, Zhedong Zheng, **Liang Zheng** Yi Yang, "Macro-Micro Adversarial Network for Human Parsing", ECCV, pp. 424-440, 2018.
- 5. Jiong Wang, Yingying Zhu, Lingxi Xie, **Liang Zheng**, "Attention-based Pyramid Aggregation Network for Visual Place Recognition", ACM Multimedia, pp. 99-107, 2018.
- Zhun Zhong, Liang Zheng et al., "Camera Style Adaptation for Person Re-identification", CVPR, pp. 5157-5166, 2018.
- 7. Weijian Deng, **Liang Zheng** et al., "Image-Image Domain Adaptation with Preserved Self-Similarity and Domain-Dissimilarity for Person Re-identification", CVPR, pp. 994-1003, 2018.
- 8. Zhedong Zheng, Liang Zheng, et al., "Unlabeled Samples Generated by GAN Improves the Person Re-identification Baseline in vitro", ICCV, pp. 3754-3762, 2017. Cited 202 times.
- 9. Yifan Sun, Liang Zheng et al., "SVDNet for Pedestrian Retrieval", ICCV, pp. 3800-3808, 2017.
- 10. Mang Ye, Jinhua Ma, **Liang Zheng**, Jiawei Li, Pongchi Yuen, "Dynamic label graph matching for unsupervised video re-identification", ICCV, pp. 5142-5150, 2017.
- 11. Liang Zheng et al., "Person Re-identification in the Wild", CVPR, pp. 1367-1376, 2017.
- 12. Zhun Zhong, **Liang Zheng** et al., "Re-ranking Person Re-identification with k-reciprocal Encoding", CVPR, pp. 1318-1327, 2017. **Cited 144 times.**
- 13. **Liang Zheng** et al., "MARS: A Video Benchmark for Large-Scale Person Re-identification", ECCV, pp. 868-884, 2016. **Cited 177 times.**
- 14. Lingxi Xie*, **Liang Zheng*** et al., "InterActive: Inter-Layer Activeness Propagation", CVPR, pp. 270-279, 2016. (* equal contribution)
- 15. Liang Zheng et al., "Scalable Person Re-identification: A Benchmark", ICCV, pp. 1116-1124, 2015. Featured by MIT Technology Review. Cited 519 times.
- 16. **Liang Zheng** et al., "Query-Adaptive Late Fusion for Image Search and Person Re-identification", CVPR, pp. 1741-1750, 2015. **Cited 202 times.**
- 17. **Liang Zheng** et al., "Packing and Padding: Coupled Multi-index for Accurate Image Retrieval", CVPR, pp. 1939-1946, 2014. **Cited 171 times.**
- 18. **Liang Zheng** et al., "Bayes Merging of Multiple Vocabularies for Scalable Image Retrieval", CVPR, pp. 1955-1962, 2014.
- 19. Liang Zheng et al., "Lep-norm IDF for Large Scale Image Search", CVPR, pp. 1626-1633, 2013.