Yan Yan

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RESEARCH INTERESTS	Machine learning and its application to computer vision and multimedia.

EDUCATION

University of Technology Sydney, Ultimo NSW Australia
Doctor of Philosophy in Information Systems — 2016-2018
Supervisor: Prof Yi Yang

University of Technology Sydney, Ultimo NSW Australia
Candidate for Master of Science in Computing Sciences — 2015-2016
Supervisor: Prof Yi Yang

The University of Queensland, St Lucia QLD Australia
Candidate for Master of Philosophy in Information Technology — 2014-2015
Supervisor: Prof Yi Yang

Tianjin University, Tianjin, China
B.E. in Computer Science and Technology — 2009-2013

EXPERIENCE

Postdoc Research Associate, Computer Science Department,
the University of Iowa, Iowa City, IA 52242 USA — 2018 - present

Research Intern, JD.com, Nanjing, Jiangsu, China — 2018

PUBLICATIONS

Refereed Journal Publications

1. **Yan Yan**, Mingkui Tan, Ivor W. Tsang, Yi Yang, Qinfeng Shi and Chengqi Zhang. "Fast and Low Memory Cost Matrix Factorization: Algorithm, Analysis and Case Study." *IEEE Transactions on Knowledge and Data Engineering.* doi: 10.1109/TKDE.2018.2882197

2. Xuanyi Dong, **Yan Yan**, Mingkui Tan, Yi Yang and Ivor W. Tsang. "Late Fusion via Subspace Search With Consistency Preservation." *IEEE Transactions on Image Processing*, vol. 28, no. 1, pp. 518-528, Jan. 2019.

3. **Yan Yan**, Feiping Nie, Wen Li, Chenqiang Gao, Yi Yang, Dong Xu. "Image Classification by Cross-Media Active Learning with Privileged Information." *IEEE Transactions on Multimedia* 18, no. 12 (2016): 2494-2502.

4. Yahong Han, Yi Yang, **Yan Yan**, Zhigang Ma, Nicu Sebe and Xiaofang Zhou. "Semi-Supervised Feature Selection via Spline Regression for Video Semantic Recognition." *IEEE Transactions on Neural Networks and Learning Systems* 26, no. 2 (2015): 252-264.

5. Xingzhong Du, **Yan Yan**, Pingbo Pan, Guodong Long and Lei Zhao. "Multiple Graph Unsupervised Feature Selection." *Signal Processing* 120 (2016): 754-760.

6. **Yan Yan**, Gaowen Liu, Sen Wang, Jian Zhang and Kai Zheng. "Graph-Based Clustering and Ranking for Diversified Image Search." *Multimedia Systems* 23, no. 1 (2017): 41-52.

7. Pufeng Du, Yang Tian and **Yan Yan**. "Subcellular localization prediction for human internal and organelle membrane proteins with projected gene ontology scores." *Journal of Theoretical Biology* 313 (2012): 61-67.

Refereed Conference Publications

1. Zhibin Hu*, Yongsheng Luo*, Jiong Lin*, **Yan Yan** and Jian Chen. Multi-Level Visual-Semantic Alignments with Relation-Wise Dual Attention Network for Image and Text Matching. In *International Joint Conference on Artificial Intelligence (IJCAI)* 2019.

2. Yanbin Liu, **Yan Yan**, Ling Chen, Yahong Han and Yi Yang. Adaptive Sparse Confidence-Weighted Learning for Online Feature Selection. In *Thirty-Third AAAI Conference on Artificial Intelligence (AAAI)* 2019.

3. Guoliang Kang, Liang Zheng, **Yan Yan**, and Yi Yang. Deep adversarial attention alignment for unsupervised domain adaptation: the benefit of target expectation maximization. In *Proceedings of the European Conference on Computer Vision (ECCV)* 2018.

4. **Yan Yan**, Tianbao Yang, Zhe Li, Qihang Lin and Yi Yang. A Unified Analysis of Stochastic Momentum Methods for Deep Learning. In *International Joint Conference on Artificial Intelligence (IJCAI)* 2018.

5. Xuanyi Dong, **Yan Yan**, Wanli Ouyang and Yi Yang. Style Aggregated Network for Facial Landmark Detection. In *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)* 2018.

6. Yu Wu, Yutian Lin, Xuanyi Dong, **Yan Yan**, Wanli Ouyang and Yi Yang. Exploit the Unknown Gradually: One-Shot Video-Based Person Re-Identification by Stepwise Learning. In *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)* 2018.

7. **Yan Yan**, Tianbao Yang, Yi Yang, Jianhui Chen. A Framework of Online Learning with Imbalanced Streaming Data. In *Thirty-First AAAI Conference on Artificial Intelligence (AAAI)* 2017.

8. Yi Xu*, **Yan Yan***, Qihang Lin, Tianbao Yang. Homotopy Smoothing for Non-Smooth Problems with Lower Complexity than $O(1/\epsilon)$. In *Neural Information Processing Systems (NeurIPS)* 2016.

9. **Yan Yan**, Zhongwen Xu, Ivor W. Tsang, Guodong Long, Yi Yang. Robust Semi-supervised Learning through Label Aggregation. In *Thirtieth Conference on Artificial Intelligence (AAAI)* 2016.

10. Mingkui Tan, **Yan Yan**, Li Wang, Anton Van Den Hengel, Ivor W. Tsang, Qinfeng (Javen) Shi. Learning Sparse Confidence-Weighted classifier on Very High Dimensional Data. In *Thirtieth Conference on Artificial Intelligence (AAAI)* 2016.

11. **Yan Yan**, Mingkui Tan, Ivor W. Tsang, Yi Yang, Chengqi Zhang and Qinfeng (Javen) Shi. Scalable Maximum Margin Matrix Factorization by Active Riemannian Subspace Search. In *International Joint Conference on Artificial Intelligence (IJCAI)* 2015, 3988-3994.

12. Joey Tianyi Zhou, Sinno Jialin Pan, Ivor W. Tsang and **Yan Yan**. Hybrid Heterogeneous Transfer Learning through Deep Learning. In *Twenty-Eighth Conference on Artificial Intelligence (AAAI)* 2014, 2213-2219.

Preprints

1. Zhuoning Yuan, **Yan Yan**, Rong Jin, Tianbao Yang. Stagewise Training Accelerates Convergence of Testing Error Over SGD. *arXiv preprint arXiv:1812.039-34v3(2018).*

2. **Yan Yan**, Yi Xu, Qihang Lin, Lijun Zhang, Tianbao Yang. Stochastic Primal-Dual Algorithms with Faster Convergence than $1/\sqrt{T}$ for Problems without Bilinear Structure. *arXiv preprint arXiv:1904.10112(2019).*

PROFESSIONAL SERVICE

Program Committee
The 28th International Joint Conference on Artificial Intelligence (IJCAI 2019).
The 33rd AAAI Conference on Artificial Intelligence (AAAI 2019).
The 27th International Joint Conference on Artificial Intelligence (IJCAI 2018).

Reviewer
IEEE Transactions on Knowledge and Data Engineering
IEEE Transactions on Multimedia
IEEE Transactions on Circuits and Systems for Video Technology
pattern Recognition
Multimedia Tools and Applications, Springer
Neurocomputing, Springer

TEACHING

Tutor: Spatial and Multimedia Databases (INFS4205), the University of Queensland, Autumn 2014.