CURRICULUM VITA

YU-FENG LI

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Education:

A.B., Computer Science, Nanjing University (Nanjing, China), 2006

Ph.D., Computer Science, Nanjing University (Nanjing, China), 2013

   Dissertation Supervisor: Zhi-Hua Zhou

   Dissertation Title: "Research on Semi-Supervised Support Vector Machine"

Position Holds:

2013- present: Assistant Researcher / Associate Researcher / Associate Professor of Computer Science and Technology, Nanjing University, China

2014(Summer): Visiting Scholar of Computer Science, University of Birmingham, United Kingdom.

2009(Winter): Visiting Sudent of Computing Science, University of Alberta, Canada.

2007-2008: Visiting Student of Computer Science and Engineering, Hong Kong University of Science and Technology, Hong Kong

Referred Publications:

➢ <u>Yu-Feng Li</u>, Hai Wang, Tong Wei, Wei-Wei Tu. Towards Automated Semi-Supervised Learning. In: Proceedings of the 33rd AAAI conference on Artificial Intelligence (**AAAI'19**), Honolulu, HI, 2019. To appear.

➢ Tong Wei, <u>Yu-Feng Li</u>. Learning compact model for large-scale multi-label learning. In: Proceedings of the 33rd AAAI conference on Artificial Intelligence (**AAAI'19**), Honolulu, HI, 2019. To appear.

➢ Tong Wei, <u>Yu-Feng Li</u>. Does tail label help for large-scale multi-label learning. In: Proceedings of the 27th International Joint Conference on Artificial Intelligence (**IJCAI'18**), Stockholm, Sweden, 2018, pp. 2847-2853.

➤ De-Ming Liang, <u>Yu-Feng Li</u>. Lightweight label propagation for large-scale network data. In: Proceedings of the 27th International Joint Conference on Artificial Intelligence (**IJCAI'18**), Stockholm, Sweden, 2018, pp. 3421-3427.

➤ De-Ming Liang, <u>Yu-Feng Li</u>. Learning safe graph construction from multiple graphs. In: Proceedings of the 1st CCF International Conference on Artificial Intelligence (**CCF-ICAI18**), Spring, 2018, 41-54.

➤ Tong Wei, Lan-Zhe Guo, <u>Yu-Feng Li</u>, Wei Gao. Learning safe multi-label prediction for weakly labeled data. Machine Learning (**MLJ**). 107(4): 703-725, 2018.

➤ Hai Wang, Shao-Bo Wang, <u>Yu-Feng Li</u>. Instance selection method for improving graph-based semi-supervised learning. Frontiers of Computer Science (**FCS**). 12(4): 725-735, 2018.

➤ Lan-Zhe Guo, <u>Yu-Feng Li</u>. A general formulation for safely exploiting weakly supervised data. In: Proceedings of the 32nd AAAI conference on Artificial Intelligence (**AAAI'18**), New Orleans, LA, 2018, pp. 3126-3133.

➤ Hao-Chen Dong, <u>Yu-Feng Li</u>, Zhi-Hua Zhou. Learning from semi-supervised weak label data. In: Proceedings of the 32nd AAAI conference on Artificial Intelligence (**AAAI'18**), New Orleans, LA, 2018, pp. 2926-2933.

➤ <u>Yu-Feng Li</u>, Han-Wen Zha, Zhi-Hua Zhou. *Learning safe prediction for semi-supervised regression*. In: Proceedings of the 31st AAAI conference on Artificial Intelligence (**AAAI'17**), San Francisco, CA, 2017, pp.2217-2223.

➤ <u>Yu-Feng Li</u>, Shao-Bo Wang, Zhi-Hua Zhou. *Graph quality judgement: A large margin expedition*. In: Proceedings of the 25th International Joint Conference on Artificial Intelligence (**IJCAI'16**), New York, NY, 2016, pp.1725-1731.

➤ Xinyue Liu, Chara Aggarwal, <u>Yu-Feng Li</u>, Xiangnan Kong, Xinyuan Sun, Saket Sathe. *Kernelized matrix factorization for collaborative filtering*. SIAM International Conference on Data Mining (**SDM'16**), Miami, FL, 2016, pp.378-386.

➤ <u>Yu-Feng Li</u>, James T. Kwok, Zhi-Hua Zhou. *Towards safe semi- supervised learning for multivariate performance measures*. In: Proceedings of the 30th AAAI conference on Artificial Intelligence (**AAAI'16**), Phoenix, AZ, 2016, pp.1816-1822.

➤ Wei Gao, Lu Wang, <u>Yu-Feng Li</u>, Zhi-Hua Zhou. *Risk minimization in the presence of label noise*. In: Proceedings of the 30th AAAI conference on Artificial Intelligence (**AAAI'16**), Phoenix, AZ, 2016, pp.1575-1581.

➤ <u>Yu-Feng Li</u>, Zhi-Hua Zhou. *Towards making unlabeled data never hurt*. **IEEE Transactions on Pattern Analysis and Machine Intelligence**, 37(1): 175-188, 2015.

➢ Yu-Feng Li, Ivor W. Tsang, James T. Kwok, Zhi-Hua Zhou. *Convex and Scalable Weakly Labeled SVMs*. **Journal of Machine Learning Research**, 14:2151-2188, 2013.

➢ Rong Jin, Tian-Bao Yang, Mehrdad Mahdavi, Yu-Feng Li and Zhi-Hua Zhou. *Improved bounds for the Nystrom method with application to kernel classification*. **IEEE Transactions on Information Theory**, 59(10): 6939-6949, 2013.

➢ Miao Xu, Yu-Feng Li, Zhi-Hua Zhou. *Multi-label learning with Proloss*. In: Proceedings of the 27th AAAI Conference on Artificial Intelligence (**AAAI'13**), Bellevue, WA, 2013, pp.998-1004.

➢ Tian-Bao Yang, Yu-Feng Li, Mehrdad Mahdavi, Rong Jin, Zhi-Hua Zhou. *Nystrom Method vs Random Fourier Features: A Theoretical and Empirical Comparison*. In Bartlett, P., Pereira, F.C.N., Burges, C.J.C., Bottou, L. & Weinberger, K.Q. editors. Advanced in the Neural Information Processing Systems (**NIPS'12**), Lake Tahoe, NV, 2012, pp.485-493.

➢ Yu-Feng Li, Ju-Hua Hu, Yuang Jiang, Zhi-Hua Zhou. *Towards discovering what patterns trigger what labels*. In: Proceedings of the 26th AAAI Conference on Artificial Intelligence (**AAAI'12**), Toronto, Canada, 2012, pp.1012-1018.

➢ Zhi-Hua Zhou, Min-Ling Zhang, Sheng-Jun Huang, Yu-Feng Li. *Multi-instance multi-label learning*. **Artificial Intelligence**, 2012, 176(1): 2291-2320.

➢ Yu-Feng Li, Zhi-Hua Zhou. *Towards making unlabeled data never hurt.* In: Proceedings of the 28th International Conference on Machine Learning (**ICML'11**), Bellevue, WA, 2011, pp.1081-1088.

➢ Yu-Feng Li, Zhi-Hua Zhou. *Improving semi-supervised support vector machines through unlabeled instances selection*. In: Proceedings of the 25th AAAI Conference on Artificial Intelligence (**AAAI'11**), San Francisco, CA, 2011, pp.386-391.

➢ Yang Yu, Yu-Feng Li, Zhi-Hua Zhou. *Diversity regularized machine*. In: Proceedings of the 22nd International Joint Conference on Artificial Intelligence (**IJCAI'11**), Barcelona, Spain, 2011, pp.1603-1608.

➢ Yu-Feng Li, James T. Kwok, Zhi-Hua Zhou. *Cost-sensitive semi-supervised support vector machine*. In: Proceedings of the 24th AAAI Conference on Artificial Intelligences (**AAAI'10**), Atlanta, GA, 2010, pp.500-505.

➢ Yu-Feng Li, James T. Kwok, Zhi-Hua Zhou. *Semi-supervised learning using label mean*. In: Proceedings of the 26th International Conference on Machine Learning (**ICML'09**), Montreal, Canada, 2009, pp.633-640.

- Zhi-Hua Zhou, Yu-Yin Sun, <u>Yu-Feng Li</u>. *Multi-instance learning by treating instances as non-i.i.d. samples*. In: Proceedings of the 26th International Conference on Machine Learning (**ICML'09**), Montreal, Canada, 2009, pp.1249-1256.

- De-Chuan Zhan, Ming Li, <u>Yu-Feng Li</u>, Zhi-Hua Zhou. *Learning instance specific distances using metric propagation*. In: Proceedings of the 26th International Conference on Machine Learning (**ICML'09**), Montreal, Canada, 2009, pp.1225-1232.

- <u>Yu-Feng Li</u>, James T. Kwok, Ivor Tsang, Zhi-Hua Zhou. *A convex method for locating regions of interest with multi-instance learning*. In: Proceedings of the 20th European Conference on Machine Learning (**ECML'09**), Bled, Slovenia, 2009, pp.17-32.

- <u>Yu-Feng Li</u>, Ivor W. Tsang, James T. Kwok, Zhi-Hua Zhou. *Tighter and convex maximum margin clustering*. In: Proceedings of the 12th International Conference on Artificial Intelligence and Statistics (**AISTATS'09**), Clearwater Beach, FL, 2009, pp.328-335.

Citations:

Google Scholar: 2,100

5 papers' citation over 100

9 papers' citation over 50

Honors:

- Young Talent Development Program, China Computer Federation, 2016 (12 National young scholars under 32 year-old were selected)

- Best Student Paper Award (with my graduate students Yuan-Zhao Li, Shao-Bo Wang), China Conference on Data Mining, 2016

- Best Student Paper Award (with my graduate student Shao-Bo Wang), China Conference on Machine Learning, 2015

- Outstanding Doctoral Dissertation Award, Jiangsu Province, China, 2014

- Outstanding Doctoral Dissertation Award, Nanjing University, 2014

- Outstanding Doctoral Dissertation Award, China Computer Federation, 2013 (10 National young scholars were selected)

- Best Student Paper Award (with Sheng-Jun Huang, Zhi-Hua Zhou), China Conference on Data Mining, 2011

- Research Travel Award, International Conference on Machine Learning, 2011

- Microsoft Fellowship Award, 2009

- Research Travel Award, International Conference on Machine Learning, 2009

Professional Activities:

Journals:

Member, Editorial Board, ACML Journal Track, 2017, 2018

Reviewer for Artificial Intelligence

Reviewer for Journal of Artificial Intelligence Research

Reviewer for Journal of Machine Learning Research

Reviewer for IEEE Trans. on Pattern Anal. and Mach. Intell.

Reviewer for Machine Learning Journal

Reviewer for IEEE Trans. on Knowledge and Data Engineering

Reviewer for ACM Trans. on Knowledge Discovery from Data

Reviewer for IEEE Trans. on Neural Network and Learning Systems

Reviewer for IEEE Trans. on Big Data

Reviewer for IEEE Trans. on Intelligent Transportation Systems

Reviewer for Neural Computation

Reviewer for Pattern Recognition

Reviewer for Pattern Recognition Letters

Reviewer for Science China

Conferences:

Member, Senior Program Committee, AAAI-19

Member, Senior Program Committee, IJCAI-15, IJCAI-17, IJCAI-19

Member, Senior Program Committee, ACML-17, ACML-18

Member, Senior Program Committee, PAKDD-18

Member, Program Committee, ICML-14/15/16/17/18/19

Member, Program Committee, NIPS-14/15/16/17/18/19

Member, Program Committee, KDD-15/16/17/18/19

Member, Program Committee, AAAI-16/17/18

Member, Program Committee, IJCAI-16/18

Member, Program Committee, CVPR-16/17/18

Member, Program Committee, ICCV-15/17

Member, Program Committee, ACML-14/15/16

Workshops/ Special Sessions:

Tutorial Co-Chair, *The 11th Asian Conference on Machine Learning*, Dec. 2019, Nagoya, Japan

Workshop Co-Chair, *The 10th Asian Conference on Machine Learning*, Dec. 2018, Beijing, China

Co-Organizer of *PAKDD workshop on Weakly Supervised Learning*, Apr. 2019, Macau, China

Co-Organizer of *IJCNN Special Session on Machine Learning with Incompletely Labeled Data*, July 2016, Vancouver, Canada

Co-Organizer of *ACML Workshop on Machine Learning in China*, November 2015, Hong Kong, China

Co-Organizer of *China Workshop on Machine Learning and Applications*, November 2016, Nanjing, China

Co-Organizer of *China Workshop on Machine Learning and Applications*, November 2015, Nanjing, China

Funding Agencies:

Reviewer for NSF-China, 2018

Reviewer for NSF-China, 2017

Reviewer for NSF-China, 2016

Others:

Reviewer for Ph. D. Dissertation (University of Technology Sydney, Australian), 2016

Invited Talks:

✧ *Safe Semi-supervised learning*, The 15th China Conference on Data Mining (CCDM2018), 2018;

✧ *From Safe to Automated Semi-Supervised Learning*, The 15th Pacific Rim International Conference on Artificial Intelligence (PRICAI2018) workshop on Automated Machine learning, 2018;

✧ *Improving the safeness of machine learning*, The 3C (Cyber, Cloud, Communication) Security Summit, 2017;

✧ *Robust Exploitation for Big Unlabeled Data*, Invited Speaker, China Big Data Forum on Big Data Machine Learning, 2016;

✧ *Research on Semi-Supervised Learning*, Invited Speaker, Tencent Seminar, 2016;

◆ *Learning methods on safely using unlabeled data*, Keynote Speaker, International Conference on Machine Learning and Cybernetics (ICMLC) Special Session, 2015;

◆ *Learning methods on safely using unlabeled data*, Invited Speaker, Hong Kong Baptist University Seminar, 2015;

◆ *Learning with large scale unlabeled data and categories*, Invited Speaker, CIKM workshop on Interactive Mining and Big Data, 2014;

◆ *Research on semi-supervised SVMs*, Invited Speaker, Birmingham University Seminar, 2014;

◆ *Research on semi-supervised SVMs*, Invited Speaker, China Workshop on machine learning and applications (MLA), 2013;

Grants:

◆ 1/15-12/17 '*Research on safe weakly supervised learning*' from NSFC (61772262), 670,000 RMB (around $100,000) [PI]

◆ 1/14-12/14 '*Safe transfer learning for ordered data*' from Baidu Collaboration, 100,000 RMB (around $14,000) [Co-PI]

◆ 6/14-6/17 '*Safely using unlabeled data and its applications*' from SF of Jiangsu Province (BK20140613), 190,000 RMB (around $27, 000) [PI]

◆ 1/15-12/17 '*Research on safe semi-supervised learning*' from NSFC (614033014), 270,000 RMB (around $38,000) [PI]

◆ 1/17-1/18 '*Machine Learning for Urban Computing*' from Microsoft Research Asia, 200,000 RMB (around $29,000) [PI]

◆ 1/14-12/17 'Research of online machine learning theories and methods in open dynamic environments' from Key Project of NSFC (613300043), 2,800,000 RMB (around $380,000) [Participate]

Student Supervised:
◆ Yu-Zhao Li (2014.9-2016.6): won CCDM2016 best student paper; Now at Baidu;
◆ Han-Wen Zha (2014.9-2016.6): got one AAAI17 co-author paper; Now a Ph.D. student at UCSB;
◆ Shao-Bo Wang (2015.9-): got one IJCAI16 co-author paper; won CCML2015, CCDM2016 best student paper; won national scholarship; won Huawei scholarship first prize;

Course Taught:

#22010710: Digital Image Processing (Spring, 2014-2018)

#22010230: Introduction to Data Mining (Spring, 2014)