Hongfu Liu

Michtom School of Computer Science

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Brandeis University	Waltham, MA, USA
Assistant Professor in Michtom School of Computer Science	07/2018 - now
Northeastern University	Boston, MA, USA
Ph.D. in Computer Engineering Advisor: Professor Yun Raymond Fu	09/2014 - 04/2018
Beihang University	Beijing, China
M.Eng. in Management Science and Engineering $Advisor$: Professor Junjie Wu	09/2011 - 06/2014
Beihang University	Beijing, China
B.Eng. in Information Management and Information System	09/2007 - 06/2011
Beihang University	Beijing, China
B.S. in Applied Mathematics	09/2007 - 06/2011
Beihang University	Beijing, China
B.A. in Law	09/2007 - 06/2011
	Assistant Professor in Michtom School of Computer Science Northeastern University Ph.D. in Computer Engineering Advisor: Professor Yun Raymond Fu Beihang University M.Eng. in Management Science and Engineering Advisor: Professor Junjie Wu Beihang University B.Eng. in Information Management and Information System Beihang University B.S. in Applied Mathematics Beihang University

RESEARCH INTERESTS

- Data-centric Learning: model interpretation, subset training set selection, data generation, noisy label detection, active learning
- Cluster Analysis: consensus clustering, constrained clustering, balanced clustering, multi-view clustering, interpretable clustering, big data clustering, fair clustering
- Transfer Learning: heterogenous domain adaptation, knowledge visualization, visual semantic learning, label distribution drift
- Fairness Learning: fairness enhancement, antidote data generation, utility-fairness trade off

INDUSTRY EXPERIENCE

• Microsoft Research Asia

Beijing, China

Data Scientist Intern, *Mentor*: Dr. Lintao Zhang & Dr. Qi Chen

06/2017 - 08/2017

Project: Fast Clustering with Flexible Balance Constraints

• Adobe Research

San Jose, CA

Data Scientist Intern, Mentor: Dr. Nikos Vlassis

05/2016 - 07/2016

Project: Greedy K-means-based Consensus Clustering for Customer Segmentation

TEACHING EXPERIENCE

• INSTRUCTOR

- \Diamond Computer Vision, Undergraduate & Graduate, Spring 2021, Spring 2023
- ♦ Scientific Data Processing in MATLAB, Undergraduate, Spring 2023
- ♦ Recommendation Systems, Graduate, Fall 2022
- ♦ Unsupervised Learning and Data Mining, Graduate, Fall 2018, Spring 2020/2022
- ♦ Data Structure, Undergraduate, Fall 2019
- ♦ Introduction to Big Data, Undergraduate & Graduate, Spring 2019, Fall 2020
- ♦ Introduction to E-Commerce, Undergraduate, Fall 2013
- ♦ Operation Research, Junior College Student, Fall 2011

TUTORIAL

- 1. Yi Fang, **Hongfu Liu**, Zhiqiang Tao and Mikhail Yurochkin. Fairness of Machine Learning in Search Engines. *ACM International Conference on Information & Knowledge Management* (CIKM), 2022.
- 2. Zhengming Ding, **Hongfu Liu** and Handong Zhao. Deep Multi-view Visual Data Analytics. AAAI Conference on Artificial Intelligence (**AAAI**), 2019.

• JOURNAL PAPERS

♦ 4 TPAMI, 5 TKDE, 1 DMKD, 2 TKDD, 1 BMC, 1 TFS, 2 TIP, 1 TNNLS

- Han Yue, Jundong Li, and Hongfu Liu. Second-Order Unsupervised Feature Selection via Knowledge Contrastive Distillation. *IEEE Transactions on Pattern Analysis and Machine Intelligence* (TPAMI), 2023.
- 2. **Hongfu Liu**, Junxiang Chen, Jennifer Dy and Yun Fu. Transforming Complex Problems into K-means Solutions. *IEEE Transactions on Pattern Analysis and Machine Intelligence* (**TPAMI-Survey**), 2023.
- 3. Han Yue, Pengyu Hong and **Hongfu Liu**. Graph-Graph Similarity Network. *IEEE Transactions on Neural Networks and Learning Systems* (**TNNLS**), 2022.
- 4. Mingyu Wan*, Han Yue*, Jaime Notarangelo, **Hongfu Liu** and Fanglin Che. Deep Learning Assisted Investigation of Electric Field-Dipole Effects on Catalytic Ammonia Synthesis. *Journal of the American Chemical Society Au* (**JACS Au**), 2022.
- 5. Wenguang Wang, Wenhong Wang and **Hongfu Liu**. Correlation Guided Ensemble Clustering for Hyperspectral Band Selection. *Remote Sensing* (**RS**), 2022.
- 6. Zihao Wang, Kun Li, Steve Xia and **Hongfu Liu**. Economic Recession Prediction Using Deep Neural Network. *The Journal of Financial Data Science* (**JFDS**), 2021.
- Han Yue, Hongfu Liu, and Jian Chen. A Gospel for MOBA Game: Ranking-Preserved Hero Change Prediction in Dota 2. IEEE Transactions on Games (TG), 2021.
- 8. Kai Li, **Hongfu Liu**, Yulun Zhang, Kunpeng Li and Yun Fu. Self-guided Deep Multiview Subspace Clustering via Consensus Affinity Regularization. *IEEE Transactions on Cybernetics* (**TC**), 2021.
- 9. Hangyu Du, Feng Chen (Co-first author), **Hongfu Liu** and Pengyu Hong. Network-based Virus-Host Interaction Prediction with Application to SARS-CoV-2. *Patterns*, 2021.
- Xiaochen Lv, Wenhong Wang and Hongfu Liu. Cluster-Wise Weighted NMF for Hyperspectral Images Unmixing with Imbalanced Data. Remote Sensing (RS), 2021.
- 11. Jun Li, **Hongfu Liu**, Zhiqiang Tao, Handong Zhao and Yun Fu. Learnable Subspace Clustering. *IEEE Transactions on Neural Networks and Learning Systems* (**TNNLS**), 2020.
- 12. Wenhong Wang and **Hongfu Liu**. Deep Nonnegative Dictionary Factorization for Hyperspectral Unmixing. *Remote Sensing* (**RS**), 2020.
- Wenhong Wang, Yuntao Qian and Hongfu Liu. Multiple Clustering Guided Nonnegative Matrix Factorization for Hyperspectral Unmixing. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing (JSTARS), 2020.
- 14. Xue Li, **Hongfu Liu** and Bin Zhu. Evolutive Preference Analysis with Online Consumer Ratings. *Information Science* (**IS**), 2020.
- 15. **Hongfu Liu**, Jun Li, Yue Wu and Yun Fu. Clustering with Outlier Removal. *IEEE Transactions on Knowledge and Data Engineering* (**TKDE**), 2019.
- Zhiqiang Tao, Hongfu Liu, Huazhu Fu and Yun Fu. Multi-View Saliency-Guided Clustering for Image Cosegmentation. *IEEE Transactions on Image Processing* (TIP), 2019.
- 17. Weiren Yu, Zhengming Ding, Chunming Hu and **Hongfu Liu**. Knowledge Reused Outlier Detection. *IEEE Access*, 2019.
- 18. Zhiqiang Tao, **Hongfu Liu**, Sheng Li, Zhengming Ding and Yun Fu. Marginalized Multi-View Ensemble Clustering. *IEEE Transactions on Neural Networks and Learning Systems* (**TNNLS**), 2019.

- 19. Deqing Wang, Chenwei Lu, Junjie Wu, **Hongfu Liu**, Wenjie Zhang and Fuzhen Zhuang. Softly Associative Transfer Learning for Cross-domain Classification. *IEEE Transactions on Cybernetics* (**TC**), 2019.
- 20. **Hongfu Liu**, Ming Shao and Yun Fu. Feature Selection with Unsupervised Consensus Guidance. *IEEE Transactions on Knowledge and Data Engineering* (**TKDE**), 2018.
- Zhiqiang Tao, Hongfu Liu, Sheng Li, Zhengming Ding and Yun Fu. Robust Spectral Ensemble Clustering via Rank Minimization. ACM Transactions on Knowledge Discovery from Data (TKDD), 2018.
- 22. Yue Wu, **Hongfu Liu**, Jun Li and Yun Fu. Improving Face Representation Learning with Center Invariant Loss. *Image and Vision Computing* (**IVC**), 2018.
- Hongfu Liu, Ming Shao, Zhengming Ding and Yun Fu. Structure-Preserved Unsupervised Domain Adaptation. *IEEE Transactions on Knowledge and Data Engineering* (TKDE), 2018.
- 24. Joseph Robinson, Ming Shao, Yue Wu, **Hongfu Liu**, Timothy Gillis and Yun Fu. Visual Kinship Recognition of Families in the Wild. *IEEE Transactions on Pattern Analysis and Machine Intelligence* (**TPAMI**), 2018.
- 25. **Hongfu Liu** and Yun Fu. Consensus Guided Multi-View Clustering. *ACM Transactions on Knowledge Discovery from Data* (**TKDD**), 2018.
- 26. Xue Li and **Hongfu Liu**. Greedy Optimization for K-means-based Consensus Clustering. *Tsinghua Science and Technology* (**TST**), 2018.
- 27. **Hongfu Liu**, Zhiqiang Tao and Yun Fu. Partition Level Constrained Clustering. *IEEE Transactions on Pattern Analysis and Machine Intelligence* (**TPAMI**), 2017.
- 28. **Hongfu Liu**, Ming Shao, Sheng Li and Yun Fu. Infinite Ensemble Clustering. *Data Mining and Knowledge Discovery* (**DMKD**), 2017.
- Hongfu Liu, Junjie Wu, Tongliang Liu, Dacheng Tao and Yun Fu. Spectral Ensemble Clustering: Theoretical and Practical Evidence. *IEEE Transactions on Knowledge* and Data Engineering (TKDE), 2017.
- Hongfu Liu, Rui Zhao, Hongsheng Fang, Feixiong Chen, Yun Fu and Yuyang Liu. Entrpoy-based Consensus Clustering for Patient Stratification. *Bioinformatics* (BMC), 2017.
- 31. Handong Zhao, **Hongfu Liu**, Zhengming Ding and Yun Fu. Consensus Regularized Multi-View Outlier Detection. *IEEE Transactions on Image Processing* (**TIP**), 2017.
- 32. Junjie Wu, Ziang Wu, Jie Cao, **Hongfu Liu**, Guoqing Chen and Yanchuan Zhang. Fuzzy Consensus Clustering with Applications on Big Data. *IEEE Transactions on Fuzzy Systems* (**TFS**), 2017.
- 33. Junjie Wu, **Hongfu Liu**, Hui Xiong, Jie Cao and Jian Chen. K-means-based Consensus Clustering: A Unified View. *IEEE Transactions on Knowledge And Data Engineering* (**TKDE**), 2015.
- 34. Junjie Wu, Shiwei Zhu, **Hongfu Liu** and Guoping Xia. Cosine Interesting Pattern Discovery. *Information Sciences* (**IS**), 2012.

• CONFERENCE PAPERS

- ♦ 5 KDD, 4 ICDM, 1 SDM, 4 ICLR, 2 NeurIPS, 2 ICML, 4 CVPR, 1 ICCV, 5 IJCAI, 5 AAAI, 2 CIKM, 3 IEEE BigData, 1 HPCC, 1 ICSSSM Best Paper
- Anshuman Chhabra, Peizhao Li, Prasant Mohapatra, and Hongfu Liu. "What Data Benefits My Classifier?" Enhancing Model Performance and Interpretability through Influence-Based Data Selection. In Proceedings of International Conference on Learning Representations (ICLR), 2024.
- 2. Peizhao Li, Ethan Xia, and **Hongfu Liu**. Learning Antidote Data to Individual Unfairness. In Proceedings of International Conference on Machine Learning (ICML), 2023.
- Anshuman Chhabra, Peizhao Li, Prasant Mohapatra, and Hongfu Liu. Robust Fair Clustering: A Novel Fairness Attack and Defense Framework. In Proceedings of International Conference on Learning Representations (ICLR), 2023.

- Zizhang Chen, Peizhao Li, Hongfu Liu and Pengyu Hong. Characterizing the Influence of Graph Elements. In Proceedings of International Conference on Learning Representations (ICLR), 2023.
- Han Yue, Chunhui Zhang, Chuxu Zhang and Hongfu Liu. Label-invariant Augmentation for Semi-Supervised Graph Classification. In Proceedings of Neural Information Processing Systems (NeurIPS), 2022.
- Han Yue, Steve Xia and Hongfu Liu. Multi-task Envisioning Transformer-based Autoencoder for Corporate Credit Rating Migration Early Prediction. In Proceedings of ACM SIGKDD International Conference on Knowledge Discovery and Data mining (KDD), 2022.
- 7. Peizhao Li and **Hongfu Liu**. Achieving Fairness at No Utility Cost via Data Reweighing. In Proceedings of International Conference on Machine Learning (ICML), 2022.
- 8. Peizhao Li, Pu Wang, Karl Berntorp and **Hongfu Liu**. Exploiting Temporal Relations on Radar Perception for Autonomous Driving. *In Proceedings of IEEE Conference on Computer Vision and Pattern Recognition* (CVPR), 2022.
- 9. Songyao Jiang, **Hongfu Liu**, Yue Wu and Yun Fu. Spatially Constrained GAN for Face and Fashion Synthesis. In Proceedings of IEEE International Conference on Automatic Face and Gesture Recognition (**FG**), 2021.
- 10. Wenxiao Xiao, Zhengming Ding and **Hongfu Liu**. Implicit Semantic Response Alignment for Partial Domain Adaptation. *In Proceedings of Neural Information Processing Systems* (**NeurIPS**), 2021.
- 11. Xiaoying Xing, **Hongfu Liu**, Chen Chen and Jundong Li. Fairness-Aware Unsupervised Feature Selection. *In Proceedings of ACM International Conference on Information and Knowledge Management* (CIKM), 2021.
- 12. Taotao Jing, **Hongfu Liu** and Zhengming Ding. Towards Novel Target Discovery Through Open-Set Domain Adaptation. *In Proceedings of International Conference on Computer Vision* (**ICCV**), 2021.
- 13. Hanyu Song, Peizhao Li and **Hongfu Liu**. Deep Clustering-based Fair Outlier Detection. In Proceedings of ACM SIGKDD International Conference on Knowledge Discovery and Data mining (**KDD**), 2021.
- 14. Peizhao Li, Jiuxiang Gu, Jason Kuen, Vlad Morariu, Handong Zhao, Rajiv Jain, Varun Manjunatha and Hongfu Liu. SelfDoc: Self-Supervised Document Representation Learning. In Proceedings of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2021.
- Peizhao Li, Yifei Wang, Han Zhao, Pengyu Hong and Hongfu Liu. On Dyadic Fairness: Exploring and Mitigating Bias in Graph Connections. In Proceedings of International Conference on Learning Representations (ICLR), 2021.
- Peizhao Li, Han Zhao and Hongfu Liu. Deep Fair Clustering in Visual Learning. In Proceedings of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2020.
- 17. Zhiqiang Tao, **Hongfu Liu**, Jun Li and Yun Fu. Adversarial Graph Embedding for Ensemble Clustering. *In Proceedings of International Joint Conference on Artificial Intelligence* (**IJCAI**), 2019.
- 18. Zhengming Ding and **Hongfu Liu**. Marginalized Latent Semantic Encoder for Zero-Shot Learning. In Proceedings of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2019.
- 19. Haitao Xiong, **Hongfu Liu**, Bineng Zhong and Yun Fu. Structured and Sparse Annotations for Image Emotion Distribution Learning. *In Proceedings of AAAI Conference on Artificial Intelligence* (**AAAI**), 2019.
- Hongfu Liu, Ziming Huang, Yun Fu, Qi Chen, Mingqin Li, and Lintao Zhang. Fast Clustering with Flexible Balance Constraints. In Proceedings of IEEE International Conference on Big Data (IEEE BigData), 2018.
- Jun Li, Hongfu Liu and Yun Fu. Predictive Coding Machine for Compressed Sensing and Image Denoising. In Proceedings of AAAI Conference on Artificial Intelligence (AAAI), 2018.

- 22. Yue Wu, Zhengming Ding, **Hongfu Liu**, Joseph Robinson and Yun Fu. Kinship Classification through Latent Adaptive Subspace. *In Proceedings of IEEE Conference on Automatic Face and Gesture Recognition* (**FG**), 2018.
- 23. Jun Li, **Hongfu Liu**, Handong Zhao, and Yun Fu. Projective Low-rank Subspace Clustering via Learning Deep Encoder. *In Proceedings of International Joint Conference on Artificial Intelligence* (IJCAI), 2017.
- 24. Zhiqiang Tao, **Hongfu Liu**, Sheng Li, Zhengming Ding and Yun Fu. From Ensemble Clustering to Multi-View Clustering. *In Proceedings of International Joint Conference on Artificial Intelligence* (IJCAI), 2017.
- 25. Zhiqiang Tao*, **Hongfu Liu***, Huazhu Fu and Yun Fu. Image Cosegmentation via Saliency-Guided Constraint Clustering with Cosine Similarity. *In Proceedings of AAAI Conference on Artificial Intelligence* (**AAAI**), 2017. (* means equal contribution)
- 26. Zhiqiang Tao, **Hongfu Liu** and Yun Fu. Simultaneous Clustering and Ensemble. *In Proceedings of AAAI Conference on Artificial Intelligence* (**AAAI**), 2017.
- 27. Sheng Li, **Hongfu Liu**, Zhiqiang Tao and Yun Fu. Multi-View Graph Learning with Adaptive Label Propagation. *In Proceedings of IEEE International Conference on Big Data* (**IEEE BigData**), 2017.
- 28. **Hongfu Liu**, Ming Shao, Sheng Li and Yun Fu. Infinite Ensemble for Image Clustering. In Proceedings of ACM SIGKDD international conference on Knowledge Discovery and Data mining (KDD), 2016.
- 29. **Hongfu Liu**, Haiyi Mao and Yun Fu. Robust Multi-View Feature Selection. *In Proceedings of IEEE International Conference on Data Mining* (**ICDM**), 2016.
- 30. **Hongfu Liu**, Ming Shao and Yun Fu. Structure-Preserved Multi-Source Domain Adaptation. *In Proceedings of IEEE International Conference on Data Mining* (**ICDM**), 2016.
- 31. **Hongfu Liu**, Ming Shao and Yun Fu. Consensus Guided Unsupervised Feature Selection. *In Proceedings of AAAI Conference on Artificial Intelligence* (**AAAI**), 2016.
- 32. **Hongfu Liu**, Yuchao Zhang, Bo Deng and Yun Fu. Bi-sampling Ensemble Outlier Detection. *In Proceedings of IEEE International Conference on Big Data* (**IEEE BigData**), 2016.
- 33. Zhiqiang Tao, **Hongfu Liu**, Sheng Li and Yun Fu. Robust Spectral Ensemble Clustering. In Proceedings of ACM International Conference on Information and Knowledge Management (CIKM), 2016.
- 34. Handong Zhao, **Hongfu Liu** and Yun Fu. Incomplete Multi-modal Visual Data Grouping. In Proceedings of International Joint Conference on Artificial Intelligence (IJCAI), 2016.
- 35. **Hongfu Liu***, Tongliang Liu*, Junjie Wu, Dacheng Tao and Yun Fu. Spectral Ensemble Clustering. In Proceedings of ACM SIGKDD international conference on Knowledge Discovery and Data mining (KDD), 2015. (* means equal contribution)
- 36. **Hongfu Liu** and Yun Fu. Clustering with Partition Level Side Information. *In Proceedings of IEEE International Conference on Data Mining* (**ICDM**), 2015.
- 37. **Hongfu Liu**, Junjie Wu, Dacheng Tao, Yuchao Zhang and Yun Fu. DIAS: A Disassemble-Assemble Framework for Highly Sparse Text Clustering. *In Proceedings of SIAM International Conference on Data Mining* (**SDM**), 2015.
- 38. **Hongfu Liu**, Cheng Gong and Junjie Wu. Consensus Clustering on big data. *In Proceedings of IEEE International Conference on Service Systems and Service Management* (ICSSSM Best Paper), 2015.
- 39. **Hongfu Liu**, Yuchao Zhang, Hao Lin and Junjie Wu. How Many Zombies Around You. In Proceedings of the IEEE International Conference on Data Mining (ICDM), 2013.
- 40. **Hongfu Liu**, Yuchao Zhang and Xue Li. Consensus Ranking From a Utility View. In Proceedings of International Conference on Natural Computation (ICNC), 2013.
- 41. Junjie Wu, **Hongfu Liu**, Hui Xiong and Jie Cao. A Theoretic Framework of K-means-based Consensus Clustering. *In Proceedings of International Joint Conference on Artificial Intelligence* (IJCAI), 2013.

- 42. Yaqiong Wang, **Hongfu Liu**, Hao Lin, Junjie Wu, Zhiang Wu and Jie Cao. SEA: A System for Event Analysis on Chinese Tweets. *In Proceedings of ACM SIGKDD International Conference on Knowledge Discovery and Data Mining* (**KDD**), 2013.
- 43. Yuchao Zhang and Hongfu Liu. A Reliable QoE-aware Framework for Cloud Service Monitoring and Ranking. In Proceedings of International Conference on Electrical and Information Technologies for Rail Transportation (EITRT), 2013.
- 44. Yuchao Zhang, **Hongfu Liu** and Bo Deng. SLA-Driven State Monitoring for Cloud Services. In Proceedings of the 15th IEEE International Conference on High Performance Computing and Communications (**HPCC**), 2013.
- 45. Yuchao Zhang, **Hongfu Liu** and Bo Deng. Evolutionary Clustering with DBSCAN. In Proceedings of International Conference on Natural Computation (ICNC), 2013.
- 46. Di Zhao, **Hongfu Liu**, Hongyi Li. A Method Based on Grey Correlation Clustering for Improving the Hierarchy of Analytic Hierarchy Process. *In Proceedings of IEEE/WIC/ACM International Conference on Web Intelligence and Intelligent Agent Technology* (WI-IAT), 2010.

• WORKSHOP

- Haiyi Mao, Hongfu Liu, Jason Xiaotian Dou, and Panayiotis V. Benos. Towards Cross-Modal Causal Structure and Representation Learning. In Machine Learning for Health Workshop (ML4H), 2022.
- Chunhui Zhang, Hongfu Liu, Jundong Li, Yanfang Ye and Chuxu Zhang. Contrastive Graph Few-Shot Learning. In NeurIPS GLFrontiers Workshop (NeurIPS-W), 2022.
- 3. Peizhao Li, Xuchao Zhang, Ziyu Yao, Wei Cheng, Haifeng Chen and **Hongfu Liu**. Code Editing from Few Exemplars by Adaptive Multi-Extent Composition. *In International Conference on Learning Representations Deep Learning For Code Workshop* (ICLR-W), 2022.
- 4. Yue Wu, **Hongfu Liu**, Yun Fu. Low-shot Face Recognition with Hybrid Classifiers. *In Proceedings of International Conference on Computer Vision Workshop* (**ICCV-W**), 2017.
- Yue Wu, Hongfu Liu, Jun Li and Yun Fu. Deep Face Recognition with Center Invariant Loss. In Proceedings of ACM Multimedia Thematic Workshop (MM-W), 2017.

PATENTS

- Nikolaos Vlassis and **Hongfu Liu**. Customer Segmentation Via Consensus Clustering US Patent. Filed: 11/12/2016.
- Junjie Wu, Hongfu Liu, Hong Li and Xiaoting Han. A Kind of Text Classification Method Based on Consensus Clustering CN Patent. Filed: 10/07/2015.

FUNDING

• MERL Gift Grant 2022-2022 *MERL*, *PI*, \$5,000

- Graph-Learning-Assisted State and Event Tracking for Solar-Penetrated Power Grids with Heterogeneous Data Sources

 2021-2024

 Department of Energy, Co-PI, \$145,000
- Machine Learning for Credit Investigation 2019-2023 Guardian Life Insurance, PI, \$325,000
- Provost Research Grant 2019-2020 Brandeis, PI, \$23,739
- Adobe Gift Grant 2019-2020 Adobe, PI, \$20,000
- Theodore and Jane Norman Fund
 Brandeis, PI, \$3,278
- Teaching Innovation Grant

 Brandeis, PI, \$8,144

HONORS &	Notable Area Chair	2023
AWARDS	International Conference on Learning Representations	
	• Top Reviewer	2022
	Uncertainty in Artificial Intelligence	
	• Global Top Young Chinese Scholars in AI (Top 25 in Data Mining Area)	2022
	Baidu Scholar	
	Highlighted Area Chair	2022
	International Conference on Learning Representations	
	• INNS 2021 Aharon Katzir Young Investigator Award	2021
	Board of Governors of the International Neural Network Society	
	• Best Student Paper	2021
	Automatic Face and Gesture Recognition	
	• Outstanding Self-Financed Students Abroad	2018
	Chinese Government Award	
	• First Place Award in MS-Celel-1M Grand Challenge	2017
	International Conference on Computer Vision	

ACTIVITIES

 $\Diamond\,$ IEEE Computational Intelligence Magazine (IEEE CIM)

• Area Chair

- \Diamond International Conference on Machine Learning (**ICML**)
- \Diamond Neural Information Processing Systems (**NeurIPS**)
- \Diamond International Conference on Learning Representations (ICRL)