

# HONGWEI WANG

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## EDUCATION

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### Postdoc, Stanford University

03 / 2019 – present

- Department of Computer Science
- Advisor: Prof. Jure Leskovec

### Ph.D., Shanghai Jiao Tong University

09 / 2014 – 12 / 2018

- Department of Computer Science and Engineering
- Advisor: Prof. Minyi Guo

### B.E., Shanghai Jiao Tong University

09 / 2010 – 06 / 2014

- Department of Computer Science and Engineering (ACM class)
- Advisor: Prof. Yong Yu

## RESEARCH INTERESTS

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- **Recommender systems** [TCSS 2017] [RecSys 2017] [CIKM 2017] [WWW 2018] [CIKM 2018a] [WWW 2019a] [WWW 2019b] [TOIS]
- **Graph representation learning** [WSDM 2018] [AAAI 2018a]
- **Machine learning applications** [ICDCS 2017] [TPDS] [AAAI 2018b] [CIKM 2018b] [AAAI 2019] [ICLR 2019]

## PUBLICATIONS

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- **Hongwei Wang**, Fuzheng Zhang, Jialin Wang, Miao Zhao, Wenjie Li, Xing Xie, Minyi Guo, Exploring High-Order User Preference on the Knowledge Graph for Recommender Systems. *ACM Transactions on Information Systems*. **TOIS**.
- **Hongwei Wang**, Miao Zhao, Xing Xie, Wenjie Li, Minyi Guo, Knowledge Graph Convolutional Networks for Recommender Systems. *The Web Conference 2019*. **WWW 2019** (short paper).
- **Hongwei Wang**, Fuzheng Zhang, Miao Zhao, Wenjie Li, Xing Xie, Minyi Guo, Multi-Task Feature Learning for Knowledge Graph Enhanced Recommendation. *The Web Conference 2019*. **WWW 2019**.
- Zhiming Zhou, Qingru Zhang, Guansong Lu, **Hongwei Wang**, Weinan Zhang, Yong Yu, **AdaShift: Decorrelation and Convergence of Adaptive Learning Rate Methods**. *The 7th International Conference on Learning Representations*. **ICLR 2019**.
- Chang Xu, Weiran Huang, **Hongwei Wang**, Wang Gang, Tieyan Liu, **Modeling Local Dependence in Natural Language with Multi-channel Recurrent Neural Networks**. *The 33rd AAAI Conference on Artificial Intelligence*. **AAAI 2019**.
- **Hongwei Wang**, Fuzheng Zhang, Jialin Wang, Miao Zhao, Wenjie Li, Xing Xie, Minyi Guo, **RippleNet: Propagating User Preferences on the Knowledge Graph for Recommender Systems**. *The 27th ACM International Conference on Information and Knowledge Management*. **CIKM 2018**.
- Zhuo Li, **Hongwei Wang**, Miao Zhao, **Weakly-Supervised Generative Adversarial Nets with Auxiliary Information for Wireless Coverage Estimation**. *The 27th ACM International Conference on Information and Knowledge Management*. **CIKM 2018** (short paper).
- **Hongwei Wang**, Fuzheng Zhang, Xing Xie, Minyi Guo, **DKN: Deep Knowledge-Aware Network for News Recommendation**. *The 27th World Wide Web Conference*. **WWW 2018**.
- Zhuo Li, **Hongwei Wang**, Miao Zhao, Wenjie Li, Minyi Guo, **Deep Representation-Decoupling Neural Networks for Monaural Music Mixture Separation**. *The 32nd AAAI Conference on Artificial Intelligence*. **AAAI 2018**.
- **Hongwei Wang**, Jia Wang, Jialin Wang, Weinan Zhang, Miao Zhao, Fuzheng Zhang, Xing Xie, Minyi Guo, **GraphGAN: Graph Representation Learning with Generative Adversarial Nets**. *The 32nd AAAI Conference on Artificial Intelligence*. **AAAI 2018**.
- **Hongwei Wang**, Song Guo, Jiannong Cao, Minyi Guo, **MELODY: A Long-term Dynamic Quality-Aware Incentive Mechanism for Crowdsourcing**. *IEEE Transactions on Parallel and Distributed Systems*. **TPDS**.

- **Hongwei Wang**, Fuzheng Zhang, Min Hou, Xing Xie, Minyi Guo, Qi Liu, [SHINE: Signed Heterogeneous Information Network Embedding for Sentiment Link Prediction](#). *The 11th ACM International Conference on Web Search and Data Mining*. **WSDM 2018**.
- **Hongwei Wang**, Jia Wang, Miao Zhao, Jiannong Cao, Minyi Guo, [Joint Topic-Semantic-aware Social Recommendation for Online Voting](#). *The 26th ACM International Conference on Information and Knowledge Management*. **CIKM 2017**.
- Jianxun Lian, Fuzheng Zhang, Min Hou, **Hongwei Wang**, Xing Xie, Guangzhong Sun, [Practical Lessons for Job Recommendations in the Cold-Start Scenario](#). *The 11th ACM Conference on Recommender Systems*. **RecSys 2017**.
- **Hongwei Wang**, Song Guo, Jiannong Cao, Minyi Guo, [MELODY: A Long-term Dynamic Quality-aware Incentive Mechanism for Crowdsourcing](#). *The 37th IEEE International Conference on Distributed Computing Systems*. **ICDCS 2017**.
- Xi Wang Yang, Chao Liang, Miao Zhao, **Hongwei Wang**, Hao Ding, Yong Liu, Yang Li, Junlin Zhang, [Collaborative Filtering Based Recommendation of Online Social Voting](#). *IEEE Transactions on Computational Social Systems*. **TCSS**.
- Shanshan Chen, Xiaoxin Tang, **Hongwei Wang**, Han Zhao, Minyi Guo, [Towards Scalable and Reliable In-memory Storage System: A Case Study with Redis](#). *The 10th IEEE International Conference on Big Data Science and Engineering*. **BigDataSE 2016**.

## TALKS

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- [RippleNet: Propagating User Preferences on the Knowledge Graph for Recommender Systems](#), at CIKM 2018, Turin, Italy, October 23, 2018.
- [When Recommender System Meets Network Representation Learning](#), at ACM-class Student Academic Festival 2018, Shanghai, China, June 3, 2018.
- [DKN: Deep Knowledge-Aware Network for News Recommendation](#), at WWW 2018, Lyon, France, April 25, 2018.
- [GraphGAN: Graph Representation Learning with Generative Adversarial Nets](#), at AAAI 2018, New Orleans, Louisiana, U.S., February 4, 2018.
- [Graph Representation Learning and GraphGAN](#), at PaperWeekly online sharing, January 10, 2018.
- [GraphGAN: Graph Representation Learning with Generative Adversarial Nets](#), at Social Computing group meeting, Microsoft Research Asia, Beijing, China, November 27, 2017.
- [Joint Topic-Semantic-aware Social Recommendation for Online Voting](#), at CIKM 2017, Singapore, November 7, 2017.
- [MELODY: A Long-term Dynamic Quality-aware Incentive Mechanism for Crowdsourcing](#), at ICDCS 2017, Atlanta, Georgia, U.S., June 8, 2017.
- [Network Embedding](#), at Social Computing group meeting, Microsoft Research Asia, Beijing, China, April 26, 2017.
- [Neural Network Models for Sentence Classification](#), at Social Computing group meeting, Microsoft Research Asia, Beijing, China, November 18, 2016.

## PROFESSIONAL EXPERIENCES

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<b>Microsoft Research Asia, full-time internship</b>	<i>09 / 2016 – 09 / 2018</i>
○ Mentor: Dr. Xing Xie	
<b>The Hong Kong Polytechnic University, research assistant</b>	<i>03 / 2016 – 09 / 2016</i>
○ Mentor: Prof. Jiannong Cao	
<b>Microsoft Research Asia, full-time internship</b>	<i>07 / 2013 – 04 / 2014</i>
○ Mentor: Dr. Feng Zhao	

## HONORS & AWARDS

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- **Tang Lixin Scholarship**, Shanghai Jiao Tong University, 2018
- **Google Ph.D. Fellowship (6 in East Asia, 57 in total)**, Google Inc., 2018
- **National Scholarship (ranking: 1st / ~200)**, Ministry of Education of the PRC, 2018

- **Overseas Alumni Doctoral Students Scholarship (top 5%)**, Shanghai Jiao Tong University, 2017
- **The 5th place in RecsysChallenge 2017**, RecSys Challenge, 2017
- **The 2nd prize of National Post-Graduate Mathematical Contest in Modeling**, GMCM Organizing Committee, 2015
- **The 3rd prize of National Post-Graduate Mathematical Contest in Modeling**, GMCM Organizing Committee, 2014
- **Outstanding Doctoral Freshman Scholarship (top 10%)**, Shanghai Jiao Tong University, 2014
- **GPA ranking: 2nd / 29**, ACM class, Shanghai Jiao Tong University, 2010-2014
- **SJTU Outstanding Undergraduate**, Shanghai Jiao Tong University, 2014
- **Arawana Scholarship (top 5%)**, Shanghai Jiao Tong University, 2013
- **Tung OOCL Scholarship (top 5%)**, Shanghai Jiao Tong University, 2012
- **The 2nd prize of National Undergraduate Mathematical Contest in Modeling (Shanghai District)**, China Society for Industrial and Applied Mathematics, 2012
- **National Encouragement Scholarship (top 10%)**, Shanghai Municipal Education Commission, 2011
- **The 2nd prize of National Undergraduate Physics Contest (Shanghai District)**, Shanghai Physical Society, 2011
- **The 3rd prize of National Senior High School Chemistry Contest (Anhui District)**, Anhui Chemical Society, 2009
- **The 3rd prize of National Senior High School Physics Contest**, Anhui Physical Society, 2009
- **The 1st prize of National Senior High School Mathematics Contest**, Chinese Mathematical Society, 2009