

# Jiawei Zhang

## Curriculum Vitae

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Last Update: September 9, 2018

## Research Interests

### Machine Learning

Deep Learning; Broad Learning; Ensemble Learning; Transfer Learning; Sparse Learning; Active Learning; Semi-supervised Learning; Feature Selection

### Data Mining and Big Data

Information Fusion; Aligned Social Networks Studies; Enterprise Social Networks; Signed Networks; Reward System Analysis and Design; CrowdSourcing Studies

### Smart City

Vehicle Sharing System Analysis; Vehicle System Expansion Planning; Route Planning; Spatial-Temporal Representation Learning

### Bioinformatics

Brain Image Analysis; Brain Area Partition

## Professional Experiences

- 2017–Present **Assistant Professor.**  
Department of Computer Science, Florida State University
- 2017–Present **Founder and Director.**  
Information Fusion and Mining Laboratory
- 3 PhD Student Members
  - 2 Master Student Members

## Education

- 2012–2017 **Ph.D. in Computer Science.**  
University of Illinois at Chicago, Chicago, IL, USA
- *Thesis:* Fusion of Heterogeneous Social Networks for Synergistic Knowledge Discovery
  - *Advisor:* Philip S. Yu, Ph.D.
- 2008–2012 **B.S. in Computer Science.**  
Nanjing University, Nanjing, Jiangsu, China

## Research Experiences

- 2013–2017 **Graduate Research Assistant**, *University of Illinois at Chicago*, Chicago, IL.  
 ◦ *Advisor*: Philip S. Yu, Ph.D.
- 2016 **Research Intern**, *Yahoo! Research*, Sunnyvale, CA.  
 ◦ *Mentors*: Jianhui Chen, Ph.D. and Yi Chang, Ph.D.
- 2015 **Research Intern**, *IBM T. J. Watson Research Center*, Yorktown Heights, NY.  
 ◦ *Mentor*: Charu Aggrawal, Ph.D.
- 2014 **Research Intern**, *Microsoft Research*, Mountain View, CA.  
 ◦ *Mentor*: Yuanhua Lv, Ph.D.

## Awards and Honors

- |      |                                      |  |
|------|--------------------------------------|--|
| 2018 | First Year Assistant Professor Award | <i>Florida State University</i>          |
| 2016 | Best Student Paper Runner Up Award   | <i>IEEE/ACM ASONAM</i>                   |
| 2016 | SIGIR Student Travel Award           | <i>ACM CIKM</i>                          |
| 2016 | IEEE Student Travel Award            | <i>IEEE CIC</i>                          |
| 2015 | SIGKDD Student Travel Award          | <i>ACM SIGKDD</i>                        |
| 2015 | ICDM Student Travel Award            | <i>IEEE ICDM</i>                         |
| 2014 | WSDM Student Travel Award            | <i>ACM WSDM</i>                          |
| 2014 | Student Travel Award                 | <i>University of Illinois at Chicago</i> |

## Grant Proposal Writing

### Funded Proposals

3 Funded Proposals, Total Budget \$1.72M (My Share \$570K)

- June 2018 **III: Medium: Collaborative Research: An Extensible Heterogeneous Network Embedding Framework with Application Specific Adaptation.**  
 ◦ PI, NSF Division of Information & Intelligent Systems  
 ◦ Personal Share: \$550K/\$1.2M
- March 2018 **CRC: Cyberspace Fake News Article and Creator Detection via a Multi-Perspective Approach.**  
 ◦ sole-PI, FSU Council on Research and Creativity  
 ◦ Personal Share: \$20K
- March 2015 **III: Small: Fusion of Heterogeneous Networks for Synergistic Knowledge Discovery.**  
 ◦ co-PI, NSF Division of Information & Intelligent Systems  
 ◦ Total Budget: \$500K

### Pending Proposals

3 Submitted Proposals, Total Budget \$3.5M (My Share \$1.703M)

- May 2018 **BigData: F: Collaborative Research: An Extensible Big Data Representation Learning Framework with Data Fragment Partition and Populous Model Ensemble.**
- PI, NSF BIGDATA
  - Personal Share: \$903K/\$1.8M
- Nov. 2017 **III: Small: Collaborative Research: Collective Representation Learning in Spatial, Temporal, and Textual Data Environments.**
- PI, NSF Division of Information & Intelligent Systems
  - Personal Share: \$250K/\$500K
- Oct. 2017 **SaTC: CORE: Medium: Collaborative: Cyberspace Fake News Article and Creator Detection via a Multi-Perspective Approach.**
- PI, NSF Secure and Trustworthy Cyberspace
  - Total Budget: \$550K/\$1.2M

## Course Teaching

- 2018 Fall **COP 4710-0001 Databases.**  
Department of Computer Science  
Florida State University
- 2018 Spring **CIS 5930-0004: Social Network Mining.**  
Department of Computer Science  
Florida State University

## Student Mentoring

### Mentored Students

- 2018–Present **Jiyang Bai.**
- Current: PhD Student@Florida State University
  - Research Topic: Optimization and Tensor Decomposition
  - Collaborated Papers:
- 2018–Present **Lin Meng.**
- Current: PhD Student@Florida State University
  - Research Topic: Heterogeneous Network Representation Learning
  - Collaborated Papers: [M1]
- 2018–Present **Yuxiang Ren.**
- Current: PhD Student@Florida State University
  - Research Topic: Broad Learning in Social Network Studies
  - Collaborated Papers: [M8]
- 2017–2017 **Conying Xia.**
- Current: PhD Candidate@University of Illinois at Chicago
  - Research Topic: Network Embedding
  - Collaborated Papers: [C12]

2016–2017 **Ye Liu.**

- Current: PhD Candidate@University of Illinois at Chicago
- Research Topic: Multiple Aligned Movie Library Analysis
- Collaborated Papers: [M17]

2016–2017 **Chenwei Zhang.**

- Current: PhD Candidate@University of Illinois at Chicago
- Research Topic: Deep Learning Application in Data Mining
- Collaborated Papers: [M17], [C13], [M13], [C12], [J12]

2015–2016 **Junxing Zhu.**

- Current: Assistant Professor@National University of Defense Technology
- Research Topic: User Resolution and Alignment across Networks
- Collaborated Papers: [C10], [J10], [C13], [J12]

2014–2016 **Qianyi Zhan.**

- Current: Assistant Professor@Jiangnan University
- Research Topic: Information Diffusion and Viral Marketing
- Collaborated Papers: [C22], [C23], [C27], [C29], [C40], [C25], [M19], [J6], [J3], [J7], [J8]

### PhD Thesis Committee

April 2018 **Xinyue Liu.**

- Current: PhD Candidate@Worcester Polytechnic Institute
- PhD Defense Proposal Talk: Synergistic Graph Discovery and Generation

March 2018 **Haixu Wang.**

- Current: PhD Candidate@Florida State University
- PhD Candidacy Talk: Network Origins of Aggregate Volatility and Macroeconomic Tail Risks

### Master Thesis Committee

July 2018 **Yu Zhang.**

- Current: Master Student@Florida State University
- Defense Talk: Big Data and Movie Recommender System

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## Research Publication

Published 1 First-Authored Textbook, 3 book chapters

46 conference papers, 12 journal articles, 3 survey papers

Submitted 17 conference manuscripts, 1 journal manuscripts

Academic No. citations: 916, h-index: 15 (By September 9, 2018)

Impact (Source: <https://scholar.google.com/citations?user=7AkZSJAAAAJ&hl=en>)

## Books

[BOOK1] **Jiawei Zhang** and Philip S. Yu. Broad Learning through Fusions: An Application on Online Social Networks. Springer. November 2018.

## Book Chapters

- [BC1] **Jiawei Zhang** and Philip S. Yu. Broad Learning based Social Community Detection. Springer.
- [BC2] **Jiawei Zhang**. Chapter 6: Fusion Learning on Heterogeneous Social Networks. Heterogeneous Information Network Analysis and Applications (Data Analytics), Chuan Shi and Philip S. Yu, Springer.
- [BC3] **Jiawei Zhang** and Philip S. Yu. Chapter: Cross-Platform Social Network Analysis. Encyclopedia of Social Network Analysis and Mining 2nd Edition, 2016.

## Journal Papers

- [J1] **Jiawei Zhang** and Philip S. Yu. Broad Learning: An Emerging Area in Social Network Analysis. SIGKDD Explorations. 2018.
- [J2] Taisong Li, **Jiawei Zhang**, Philip Yu, Yan Zhang and Yonghong Yan Deep Dynamic Network Embedding for Link Prediction. IEEE Access. 2018.
- [J3] Qianyi Zhan, **Jiawei Zhang** and Philip S. Yu. Integrated Anchor and Social Link Predictions across Multiple Social Networks. Knowledge and Information Systems. 2018.
- [J4] Pengyang Wang, Yanjie Fu, **Jiawei Zhang**, Xiaolin Li and Dan Lin. Learning Urban Community Structures: A Collective Embedding Perspective with Periodic Spatial-temporal Mobility Graphs. ACM Transactions on Intelligent Systems and Technology (TIST), 2018.
- [J5] Chuan Shi, Yitong Li, **Jiawei Zhang** and Yizhou Sun, Philip S. Yu. A Survey of Heterogeneous Information Network Analysis. IEEE Transactions on Knowledge and Data Engineering (TKDE), Volume PP, Issue 99, DOI: 10.1109/TKDE.2016.2598561, ISSN: 1041-4347, 2017.
- [J6] **Jiawei Zhang**, Qianyi Zhan and Philip S. Yu. Concurrent Alignment of Multiple Anonymized Social Networks with Generic Stable Matching. Springer Advances in Intelligent Systems and Computing (AISC) Journal, Volume 446, pp 173-196, 2016.
- [J7] Qianyi Zhan, **Jiawei Zhang**, Philip S. Yu and Junyuan Xie. Community Detection for Emerging Social Networks. WWW Journal. 2016.
- [J8] Qianyi Zhan, **Jiawei Zhang**, Philip S. Yu, Sherry Emery and Junyuan Xie. Inferring Social Influence of Anti-Tobacco Mass Media Campaigns. IEEE Transactions on NanoBioscience. Volume: 16 Issue: 5, 2017
- [J9] Weiwei Shi, Yongxin Zhu, Philip S. Yu, **Jiawei Zhang**, Tian Huang, Chang Wang, and Yufeng Chen. Effective Prediction of Missing Data on Apache Spark over Multivariable Time Series. IEEE Transaction on Big Data (*TBD*).

- [J10] Junxing Zhu, **Jiawei Zhang**, Quanyuan Wu, Bin Zhou, Xiaokai Wei and Philip S. Yu. Constrained Active Learning for Anchor Link Prediction across Heterogeneous Social Networks. *Sensors Journal*.
- [J11] **Jiawei Zhang**, Songchang Jin and Philip S. Yu. Mutual Community Detection across Multiple Partially Aligned Social Networks. *Services Transactions on Big Data (STBD)*. Volume 3, Issue 2, 2016.
- [J12] Junxing Zhu, **Jiawei Zhang**, Chenwei Zhang, Quanyuan Wu, Yan Jia, Bin Zhou and Philip S. Yu CHRS: Cold Start Recommendation across Multiple Heterogeneous Information Networks. *Journal of IEEE Access*. Volume 14, Issue 8. 2015.

### Conference Papers

- [C1] Pengyang Wang, Yanjie Fu, **Jiawei Zhang**, Pengfei Wang, Yu Zheng and Charu Aggarwal. You Are How You Drive: Peer and Temporal-Aware Representation Learning for Driving Behavior Analysis. In: *Proceedings of the 24th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD '18)*, London, UK, August 19-23, 2018.
- [C2] Limeng Cui, Zhensong Chen, **Jiawei Zhang**, Philip S. Yu, Yong Shi and Lifang He. Multi-view Collective Tensor Decomposition for Cross-modal Hashing. In: *Proceedings of the ACM International Conference on Multimedia Retrieval (ICMR '18)*, Yokohama, Japan, June 11-14, 2018.
- [C3] Lifang He, Chun-Ta Lu, Yong Chen, **Jiawei Zhang**, Linlin Shen, Philip S. Yu and Fei Wang. A Self-Organizing Tensor Architecture for Multi-View Clustering. In: *Proceedings of the 2018 IEEE International Conference on Data Mining (ICDM '18)*, Singapore, November 17-20, 2018.
- [C4] Lei Zheng, Chun-Ta Lu, Fei Jiang, **Jiawei Zhang** and Philip S. Yu. Spectral Collaborative Filtering. In: *Proceedings of the 12th ACM Conference on Recommender Systems (RecSys '18)*, Vancouver, Canada, October 2-7, 2018.
- [C5] Limeng Cui, Zhensong Chen, **Jiawei Zhang**, Lifang He, Yong Shi and Philip S. Yu. Data Fusion for Cross-modal Retrieval Using Tensor Modeling. In: *Proceedings of the 2018 IEEE International Conference on Image Processing (ICIP '17)*, Athens, Greece, October 7-10, 2018.
- [C6] Kunpeng Liu, Pengyang Wang, **Jiawei Zhang**, Guannan Liu, Yanjie Fu and Sajal K. Das. Incorporating Interaction Coupling among Multi-View Spatiotemporal Contexts for Mobike Destination Prediction. In: *Proceedings of the SIAM International Conference on Data Mining (SDM '18)*, San Diego, California, USA, May 3-5, 2018.
- [C7] Pengyang Wang, **Jiawei Zhang**, Guannan Liu, Yanjie Fu and Charu C. Aggarwal. Ensemble-Spotting: Prioritizing Vibrant Communities via POI Embedding with Multi-view Spatial Graphs. In: *Proceedings of the SIAM International Conference on Data Mining (SDM '18)*, San Diego, California, USA, May 3-5, 2018.

- [C8] **Jiawei Zhang**, Jianhui Chen, Shi Zhi, Yi Chang, Philip S. Yu and Jiawei Han. Link Prediction across Aligned Networks with Sparse Low Rank Matrix Estimation. In: Proceedings of the 2017 IEEE International Conference on Data Engineering (*ICDE '17*), San Diego, California, USA, April 19-22, 2017.
- [C9] **Jiawei Zhang**, Philip S. Yu, Yuanhua Lv. Enterprise Social Community Detection via Hierarchical Information Fusion. In: Proceedings of the 2017 IEEE International Conference on Data Engineering (*ICDE '17*), San Diego, California, USA, April 19-22, 2017.
- [C10] **Jiawei Zhang**, Jianhui Chen, Junxing Zhu, Yi Chang, and Philip S. Yu. Link Prediction with Cardinality Constraints. In: Proceedings of the 10th ACM International WSDM Conference (*WSDM '17*), Cambridge, UK, February 6-10, 2017.
- [C11] **Jiawei Zhang**, Philip S. Yu, Yuanhua Lv. Enterprise Employee Training via Project Team Formation. In: Proceedings of the 10th ACM International WSDM Conference (*WSDM '17*), Cambridge, UK, February 6-10, 2017.
- [C12] **Jiawei Zhang**, Congying Xia, Chenwei Zhang, Limeng Cui, Yanjie Fu and Philip S. Yu. BL-MNE: Emerging Heterogeneous Social Network Embedding through Broad Learning with Aligned Autoencoder. In: Proceedings of the IEEE International Conference on Data Mining (*ICDM '17*), New Orleans, Louisiana, USA, November 18-21, 2017.
- [C13] Zhu Junxing, **Jiawei Zhang**, Lifang He, Quanyuan Wu, Bin Zhou, Chenwei Zhang and Philip Yu. Broad Learning based Multi-Source Collaborative Recommendation. In: Proceedings of the 2017 International Conference on Information and Knowledge Management (*CIKM '17*), Singapore, November 6-10, 2017.
- [C14] **Jiawei Zhang**, Limeng Cui, Philip S. Yu and Yuanhua Lv. BL-ECD: Broad Learning based Enterprise Community Detection via Hierarchical Structure Fusion. In: Proceedings of the 2017 International Conference on Information and Knowledge Management (*CIKM '17*), Singapore, November 6-10, 2017.
- [C15] **Jiawei Zhang**, Charu Aggarwal and Philip S. Yu. Rumor Initiator Detection in Infected Signed Network. In: Proceedings of the 37th IEEE International Conference on Distributed Computing Systems (*ICDCS '17*), Atlanta, GA, USA, June 5-8, 2017.
- [C16] Limeng Cui, **Jiawei Zhang**, Zhensong Chen, Yong Shi, and Philip S. Yu. Inverse Extreme Learning Machine for Learning with Label Proportions. In: Proceedings of the 2017 IEEE International Conference on Big Data (*IEEE BigData 2017*), Boston, MA, USA, December 11-14, 2017.
- [C17] Lichao Sun, Xiaokai Wei , **Jiawei Zhang**, Lifang He, Philip S. Yu, and Witawas Srisa-an. PUDroid: Positive and Unlabeled Learning to Detect Zero-day Android Malware. In: Proceedings of the 2017 IEEE International Conference on Big Data (*IEEE BigData 2017*), Boston, MA, USA, December 11-14, 2017.

- [C18] **Jiawei Zhang**, Philip S. Yu, Charu C. Aggarwal and Limeng Cui. Social Attitude Expression Prediction in Signed Networks. In: Proceedings of the 6th IEEE International Congress on Big Data (*IEEE BigData Congress '17*), Honolulu, Hawaii, USA, June 25-30, 2017.
- [C19] **Jiawei Zhang**, and Philip S. Yu. PCT: Partial Co-Alignment of Social Networks. In: Proceedings of the 25th International World Wide Web Conference (*WWW '16*), Montreal, Canada, April 11-15, 2016.
- [C20] Qingbo Hu, Sihong Xie, **Jiawei Zhang**, Qiang Zhu and Philip S. Yu. HeteroSales: Utilizing Heterogeneous Social Networks to Identify the Next Enterprise Customer. In: Proceedings of the 25th International World Wide Web Conference (*WWW '16*), Montreal, Canada, April 11-15, 2016.
- [C21] **Jiawei Zhang**, Xiao Pan, Moyin Li and Philip S. Yu. Bicycle-Sharing System Expansion: Station Re-Deployment through Crowd Planning. In: Proceedings of the 24th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (*SIGSPATIAL '16*), San Francisco Bay Area, California, USA, October 31-November 3, 2016.
- [C22] **Jiawei Zhang**, Philip S. Yu, Yuanhua Lv and Qianyi Zhan. Information Diffusion at Workplace. In: Proceedings of the 25th ACM International Conference on Information and Knowledge Management (*CIKM '16*), Indianapolis, Indiana, USA, October 24-28, 2016.
- [C23] **Jiawei Zhang**, Qianyi Zhan, Lifang He, Charu C. Aggarwal and Philip S. Yu. Trust Hole Identification in Signed Networks. In: Proceedings of the 2016 European Conference on Machine Learning and Principles and Practice of Knowledge Discovery (*ECML-PKDD '16*), Riva del Garda, Italy, September 19-23, 2016.
- [C24] Guixiang Ma, Lifang He, Bokai Cao, **Jiawei Zhang**, Philip S. Yu, and Ann B. Ragin. Multi-Graph Clustering based on Interior-Node Topology with Applications to Brain Networks. In: Proceedings of the 2016 European Conference on Machine Learning and Principles and Practice of Knowledge Discovery (*ECML-PKDD '16*), Riva del Garda, Italy, September 19-23, 2016.
- [C25] Qianyi Zhan, **Jiawei Zhang**, Philip S. Yu, Sherry Emery and Junyuan Xie. Inferring Social Influence of Anti-Tobacco Mass Media Campaigns. In: Proceedings of the IEEE International Conference on Bioinformatics and Biomedicine (*BIBM '16*), Shenzhen, China, December 15-18, 2016.
- [C26] **Jiawei Zhang**, Xiangnan Kong and Philip S. Yu. Social Badge System Analysis. In: Proceedings of the 2016 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (*ASONAM '16*), San Francisco, CA, USA, 18-21 August, 2016. (**Best Student Paper Runner Up**)
- [C27] **Jiawei Zhang**, Senzhang Wang, Qianyi Zhan and Philip S. Yu. Intertwined Viral Marketing in Social Networks. In: Proceedings of the 2016 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (*ASONAM '16*), San Francisco, CA, USA, 18-21 August, 2016.



- [C28] Xiao Pan, **Jiawei Zhang**, Fengjiao Wang and Philip S. Yu. Distance-based Social Discovery with Posterior Privacy Verification. In: Proceedings of the 2016 IEEE International Conference on Big Data (*IEEE BigData 2016*), Washington D.C., USA, 5-8, December 2016.
- [C29] Qianyi Zhan, **Jiawei Zhang**, Philip S. Yu and Junyuan Xie. Discover Tipping Users For Cross Network Influencing. In: Proceedings of the IEEE 17th International Conference on Information Reuse and Integration (*IRI '16*), Pittsburgh, PA, USA, July 28-30, 2016. (Invited Paper)
- [C30] Weixiang Shao, **Jiawei Zhang**, Lifang He and Philip S. Yu. Multi-Source Multi-View Clustering via Discrepancy Penalty. In: Proceedings of the International Joint Conference on Neural Networks (*IJCNN '16*), Vancouver, Canada, July 24-29, 2016.
- [C31] **Jiawei Zhang** and Philip S. Yu. Trip Route Planning for Bicycle-Sharing Systems. In: Proceedings of the 2nd IEEE International Conference on Collaboration and Internet Computing (*IEEE CIC '16*), Pittsburgh, PA, USA, November 1-3, 2016.
- [C32] **Jiawei Zhang**, Xiao Pan, Moyin Li and Philip S. Yu. Bicycle-Sharing System Analysis and Trip Prediction. In: Proceedings of the 17th International Conference on Mobile Data Management (*MDM '16*), Porto, Portugal, June 13-16, 2016.
- [C33] **Jiawei Zhang**, Philip S. Yu and Yuanhua Lv. Organizational Chart Inference. In: Proceedings of the 21st ACM SIGKDD Conference on Knowledge Discovery and Data Mining (*KDD '15*), Sydney, Australia, August 10-13, 2015.
- [C34] **Jiawei Zhang**, and Philip S. Yu. Multiple Anonymized Social Networks Alignment. In: Proceedings of the IEEE International Conference on Data Mining (*ICDM '15*), Atlantic City, NJ, USA, November 14-17, 2015.
- [C35] **Jiawei Zhang** and Philip S. Yu. Integrated Anchor and Social Link Predictions across Partially Aligned Social Networks. In: Proceedings of the International Joint Conference on Artificial Intelligence (*IJCAI '15*), Buenos Aires, Argentinean, July 25-31, 2015.
- [C36] **Jiawei Zhang**, Yuanhua Lv and Philip S. Yu. Enterprise Social Link Recommendation. In: Proceedings of the 24th ACM International Conference on Information and Knowledge Management (*CIKM '15*), Melbourne, Australia, October 19-23, 2015.
- [C37] **Jiawei Zhang** and Philip S. Yu. Community Detection for Emerging Networks. In: Proceedings of the 15th SIAM International Conference on Data Mining (*SDM '15*), Vancouver, British Columbia, Canada, April 30-May 2, 2015.
- [C38] **Jiawei Zhang**, Weixiang Shao, Senzhang Wang, Xiangnan Kong and Philip S. Yu. PNA: Partial Network Alignment with Generic Stable Matching. In: Proceedings of the 16th IEEE International Conference on Information Reuse and Integration (*IEEE IRI '15*), San Francisco, CA, USA, August 13-15, 2015. (Invited Paper)

- [C39] **Jiawei Zhang** and Philip S. Yu. MCD: Mutual Clustering across Multiple Heterogeneous Networks. In: Proceedings of IEEE BigData Congress (*IEEE BigData Congress '15*), New York City, NY, June 27-July 2, 2015. (Invited Paper)
- [C40] Qianyi Zhan, **Jiawei Zhang**, Senzhang Wang, Philip S. Yu and Junyuan Xie. Influence Maximization across Partially Aligned Heterogenous Social Networks. In: Proceedings of the 19th Pacific-Asia Conference on Knowledge Discovery and Data Mining (*PAKDD '15*), Ho Chi Minh City, Vietnam, May 19-22, 2015.
- [C41] Senzhang Wang, Honghui Zhang, **Jiawei Zhang**, Philip S. Yu and Zhoujun Li. Inferring Diffusion Networks with Structure Transfer. In: Proceedings of the 20th International Conference on Database Systems for Advanced Applications (*DASFAA '15*), Hanoi, Vietnam, April 20-23, 2015.
- [C42] **Jiawei Zhang**, Philip S. Yu and Zhi-Hua Zhou. Meta-path based Multi-network Collective Link Prediction. In: Proceedings of the 20th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (*KDD '14*), New York City, NY, August 24-27, 2014.
- [C43] **Jiawei Zhang**, Xiangnan Kong and Philip S. Yu. Transferring Heterogeneous Links across Location-Based Social Networks. In: Proceedings of the 7th International ACM Conference on Web Search and Data Mining (*WSDM '14*), New York City, NY, February 24-28, 2014.
- [C44] Songchang Jin, **Jiawei Zhang**, Philip S. Yu, Shuqiang Yang and Aiping Li. Synergistic Partitioning in Multiple Large Scale Social Networks. In: Proceedings of the 2014 IEEE International Conference on Big Data (*IEEE BigData '14*), Washington, DC, October 27-30, 2014.
- [C45] **Jiawei Zhang**, Xiangnan Kong and Philip S. Yu. Predicting Social Links for New Users across Aligned Heterogeneous Social Networks. In: Proceedings of the 13th IEEE International Conference on Data Mining (*ICDM '13*), Dallas, Texas, December 7-10, 2013.
- [C46] Xiangnan Kong, **Jiawei Zhang** and Philip S. Yu. Inferring Anchor Links across Heterogeneous Social Networks. In: Proceedings of the 22nd ACM International Conference on Information and Knowledge Management (*CIKM '13*), San Francisco, CA, October 27-November 1, 2013.

### Survey Papers

- [R1] **Jiawei Zhang**. Social Network Fusion and Mining: A Survey. May 2018.
- [R2] **Jiawei Zhang**. Link Prediction across Heterogeneous Social Networks: A Survey.
- [R3] Philip S. Yu, **Jiawei Zhang**. On Mining Big Data and Social Network Analysis. July 2014.

### Submitted Manuscripts

- [M1] Lin Meng, **Jiawei Zhang** and Fanghua Ye. Deep Heterogeneous Social Network Alignment. Submitted to the 2018 IEEE International Conference on Data Mining (*ICDM '18*).
- [M2] **Jiawei Zhang**, Limeng Cui, and Fisher B. Gouza. GEN Model: An Alternative Approach to Deep Neural Network Models. Submitted to the 2018 Conference on Neural Information Processing Systems (*NIPS '18*).
- [M3] **Jiawei Zhang**, Limeng Cui, and Fisher B. Gouza. GADAM: Genetic-Evolutionary ADAM for Deep Neural Network Optimization. Submitted to the 2018 Conference on Neural Information Processing Systems (*NIPS '18*).
- [M4] **Jiawei Zhang**, Limeng Cui, and Fisher B. Gouza. On Deep Ensemble Learning from a Function Approximation Perspective. Submitted to the 2018 Conference on Neural Information Processing Systems (*NIPS '18*).
- [M5] **Jiawei Zhang**, Limeng Cui, and Fisher B. Gouza. Deep Loopy Neural Network Model for Graph Structured Data Representation Learning. Submitted to the 2018 Conference on Neural Information Processing Systems (*NIPS '18*).
- [M6] **Jiawei Zhang**, Limeng Cui, and Fisher B. Gouza. Reconciled Polynomial Machine: A Unified Representation of Shallow and Deep Learning Models. Submitted to the 2018 Conference on Neural Information Processing Systems (*NIPS '18*).
- [M7] **Jiawei Zhang**, Limeng Cui, and Fisher B. Gouza. A Theoretic Analysis of Broad Learning. Submitted to the 2018 Conference on Neural Information Processing Systems (*NIPS '18*).
- [M8] Yuxiang Ren and **Jiawei Zhang**. Meta Diagram based Active Social Networks Alignment. Submitted to the 24th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (*KDD '18*).
- [M9] **Jiawei Zhang**, Limeng Cui, Yanjie Fu and Fisher B. Gouza. Application Oriented Network Embedding. Submitted to the 24th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (*KDD '18*).
- [M10] **Jiawei Zhang**, Limeng Cui and Fisher B. Gouza. EgoCoder: Intelligent Program Synthesis with Hierarchical Sequential Neural Network Model. Submitted to the 24th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (*KDD '18*).
- [M11] **Jiawei Zhang**, Limeng Cui, Yanjie Fu and Fisher B. Gouza. seGEN: Sample-Ensemble Genetic Evolutional Network Model. Submitted to the 24th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (*KDD '18*).
- [M12] **Jiawei Zhang**, Limeng Cui, Yanjie Fu and Fisher B. Gouza. Fake News Detection with Deep Diffusive Newtork Model. Submitted to the 24th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (*KDD '18*).
- [M13] **Jiawei Zhang**, Chenwei Zhang, Bowen Dong, Limeng Cui, Yang Yang and Philip S. Yu. Missing Entity Synergistic Completion across Multiple Isomeric Online

Knowledge Libraries. Submitted to the 24th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (*KDD '18*).

- [M14] Kunpeng Liu, Yanjie Fu, Le Wu, Pengyang Wang, **Jiawei Zhang** and Xiaolin Li. Why Should I 'Like' It? Modeling the Effects of Individual and Group Heterogeneity on Multi-Aspect Rating Behavior. Submitted to the 24th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (*KDD '18*).
- [M15] Yang Yang, Xie Hu, Haoyan Liu, **Jiawei Zhang**, Zhoujun Li and Philip S. Yu. r-instance Learning for Missing People Tweets Identification. Submitted to the 23<sup>rd</sup> International Conference on Database Systems for Advanced Applications (*DASFAA '18*).
- [M16] Yang Yang, Lei Zheng, **Jiawei Zhang**, Qingcai Cui, Zhoujun Li, and Philip S Yu. TI-CNN: Convolutional Neural Networks for Fake News Detection. Submitted to the 23<sup>rd</sup> International Conference on Database Systems for Advanced Applications (*DASFAA '18*).
- [M17] Ye Liu, **Jiawei Zhang**, Chenwei Zhang and Philip S. Yu. Data-driven Blockbuster Planning on Online Movie Knowledge Library. In: Proceedings of the 2017 International Conference on Information and Knowledge Management (*CIKM '17*).
- [M18] Sina Sajadmanesh, **Jiawei Zhang** and Hamid R. Rabiee. NP-GLM: A Non-Parametric Method for Temporal Link Prediction. Submitted to the International Joint Conference on Artificial Intelligence (*IJCAI '17*).
- [M19] Qianyi Zhan, **Jiawei Zhang**, Philip S. Yu and Junyuan Xie. Viral Marketing through Aligned Networks. Submitted to the WWW Journal (*WWW Journal*).

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## Invited Talks

- Nov. 2017 An Introduce to Network Embedding Methods, Florida State University
- Oct. 2017 Social Network Mining: An Introduction, Florida State University
- April 2017 Fusion of Heterogeneous Social Networks for Synergistic Knowledge Discovery, Florida State University
- March 2017 Fusion of Heterogeneous Social Networks for Synergistic Knowledge Discovery, University of Louisiana at Lafayette
- March 2017 Fusion of Heterogeneous Social Networks for Synergistic Knowledge Discovery, Indiana University Purdue University Indianapolis
- Feb. 2017 Fusion of Heterogeneous Social Networks for Synergistic Knowledge Discovery, Indiana University Bloomington
- Feb. 2017 Fusion of Heterogeneous Social Networks for Synergistic Knowledge Discovery, Rensselaer Polytechnic Institute
- Feb. 2017 Fusion of Heterogeneous Social Networks for Synergistic Knowledge Discovery, University Alabama at Birmingham
- Feb. 2017 Fusion of Heterogeneous Social Networks for Synergistic Knowledge Discovery, New Jersey Institute of Technology

- Feb. 2017 Fusion of Heterogeneous Social Networks for Synergistic Knowledge Discovery, Temple University
- Aug. 2016 Link Prediction with Cardinality Constraint, Yahoo! Research
- May 2016 Fusion of Heterogeneous Social Networks for Synergistic Knowledge Discovery
- Aug. 2014 Enterprise Social Network Analysis and Social Link Recommendation, Microsoft Research

## Professional Services

### Transaction Information Director and Specialist

- ACM Transactions on Knowledge Discovery from Data (TKDD) August 2014 to September 2017.

### Conference Session Chair

- IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining, Session 7C: Adversarial/Trust 2, *ASONAM 2016*

### Conference Program Committee

- SIAM Data Mining Conference, *SDM 2019*
- AAAI Conference on Artificial Intelligence, *AAAI 2019*
- SIGKDD Conference of Knowledge Discovery and Data Mining, *KDD 2018*
- International Conference on Information and Knowledge Management, *CIKM 2018*
- IEEE International Conference on Information Reuse and Integration, *IRI 2018*
- International Conference on Data Mining, *ICDM 2018*
- International Joint Conference on Artificial Intelligence, *IJCAI-ECAI 2018*
- International World Wide Web Conference, *WWW 2018* (Poster Track)
- SIAM Data Mining Conference, *SDM 2018*
- The Annual Student Research Symposium at HiPC, *HiPC 2018*
- Workshop on Big Traffic Data Analytics, *BigTraffic 2018*
- ACM International Conference on Information and Knowledge Management, *CIKM 2017*
- Asia Information Retrieval Societies Conferenc, *AIRS 2017*
- IEEE International Conference on Information Reuse and Integration, *IRI 2017*
- International Conference on Data Mining, *ICDM 2017*
- International World Wide Web Conference, *WWW 2017*

- International Conference on Advanced Data Mining and Applications, *ADMA 2017*
- ACM International Conference on Information and Knowledge Management, *CIKM 2016*
- ACM SIGKDD Conference of Knowledge Discovery and Data Mining, *KDD 2016*
- Asia Information Retrieval Societies Conferenc, *AIRS 2016*
- International Conference on Data Analytics, *DATA ANALYTICS 2016*
- ACM International Conference on Information and Knowledge Management, *CIKM 2015*

### Journal Reviewer

- IEEE Access Journal, *ACCESS 2018*
- IEEE Transactions on Knowledge and Data Engineering, *TKDE 2017*
- IEEE Transactions on Systems, Man and Cybernetics: Systems, *SMCA 2017*
- ACM Transactions on Knowledge Discovery from Data, *TKDD 2016*
- ACM Transactions on Knowledge Discovery from Data, *TKDD 2015*
- ACM Transactions on Knowledge Discovery from Data, *TKDD 2014*
- IEEE Transactions on Knowledge and Data Engineering, *TKDE 2014*
- ACM Transactions on Knowledge Discovery from Data, *TKDD 2013*