

Jundong Li

CONTACT INFORMATION	BYENG 561 AC 699 South Mill Ave Tempe, AZ 85281, USA	<i>Phone: +1-480-738-8409</i> <i>Email: jundongli@asu.edu</i> <i>Homepage: http://www.public.asu.edu/~jundongli/</i>
RESEARCH INTERESTS	<ul style="list-style-type: none">• Data Mining: dimensionality reduction; dynamic networks; data streams; network embedding; relational learning; anomaly detection; online learning; sentiment analysis; recommender systems; clustering; active learning; semi-supervised learning; associative classification; co-location pattern mining; spatial-temporal data mining• Feature Selection: unsupervised feature selection; feature selection on networks; feature selection on dynamic networks; streaming feature selection; multi-label feature selection; feature selection on signed networks; personalized feature selection• Social Computing: social network analysis; signed social networks; reciprocal link analysis; user behavior analysis; social cyberbullying detection; social mental health; social security	
EDUCATION	Arizona State University , Tempe, Arizona, USA Ph.D., Computer Science and Engineering <ul style="list-style-type: none">• GPA: 4.00/4.00• Advisor: Huan Liu, Ph.D, Fellow of IEEE University of Alberta , Edmonton, Alberta, Canada M.Sc., Department of Computing Science <ul style="list-style-type: none">• GPA: 4.00/4.00• Advisor: Osmar R. Zaiane, Ph.D Zhejiang University , Hangzhou, Zhejiang, China B.Eng., College of Computer Science and Technology <ul style="list-style-type: none">• GPA: 3.71/4.00	Aug 2014 - Present Sep 2012 - Jul 2014 Aug 2008 - Jun 2012
RESEARCH EXPERIENCES	Intern Scientist, Yahoo! Research Mentor: Yi Chang, Ph.D and Jiliang Tang, Ph.D <ul style="list-style-type: none">• Reciprocal behaviors analysis on dynamic social networks• User reciprocal delay prediction on Tumblr Research Assistant, Computer Science, ASU Advisor: Huan Liu, Ph.D, Fellow of IEEE <ul style="list-style-type: none">• Feature selection for social media data• Dynamic social network analysis• Social relational learning• Anomaly detection on networks• Feature selection repository - <i>scikit-feature</i> (news coverage on KDnuggets) Research Assistant, Computing Science, UAlberta Advisor: Osmar R. Zaiane, Ph.D <ul style="list-style-type: none">• Associative classification with statistically significant rules• Co-location pattern mining on extended spatial objects	May 2016 - Aug 2016 Dec 2014 - present May 2013 - Jul 2014

- PREPRINTS
- [P1] **Jundong Li**, Kewei Cheng, Suhang Wang, Fred Morstatter, Robert P. Trevino, Jiliang Tang and Huan Liu. “Feature Selection: A Data Perspective”, arXiv preprint, arXiv:1601.07996.
- [P2] **Jundong Li**, Harsh Dani, Xia Hu, Jiliang Tang, Yi Chang, Huan Liu. “Attributed Network Embedding for Learning in a Dynamic Environment”, arXiv preprint, arXiv:1706.01860.
- [P3] **Jundong Li**, Jiliang Tang, Yilin Wang, Yali Wan, Yi Chang, Huan Liu. “Understanding and Predicting Delay in Reciprocal Relations”, arXiv preprint, arXiv:1703.01393.
- CONFERENCE TUTORIALS
- [T1] **Jundong Li**, Jiliang Tang, Huan Liu. “Recent Advances in Feature Selection: A Data Perspective”, In Proceedings of 23rd ACM SIGKDD International Conference on Knowledge Discovery and Data Mining, Halifax, Canada, Aug 13-17, 2017
- REFEREED BOOK CHAPTERS
- [B1] Luiza Antonie, **Jundong Li**, Osmar R. Zaiane. “Negative Association Rules”, In Frequent Pattern Mining (editors: Charu C. Aggarwal and Jiawei Han), Springer, 2014.
- REFEREED JOURNAL PUBLICATIONS
- [J1] Ling Jian, **Jundong Li**, Huan Liu. “Toward Online Node Classification on Streaming Networks”, Data Mining and Knowledge Discovery (DMKD), 2017 (To Appear)
- [J2] Ling Jian, **Jundong Li**, Shihua Luo. “Exploiting Expertise Rules for Statistical Data-Driven Modeling”, IEEE Transactions on Industrial Electronics (TIE), 2017. (To Appear)
- [J3] **Jundong Li**, Huan Liu. “Challenges of Feature Selection for Big Data Analytics”, IEEE Intelligent Systems, 32(2): 9-15, 2017.
- [J4] **Jundong Li**, Osmar R. Zaiane. “Exploiting Statistically Significant Dependent Rules for Associative Classification”, Intelligent Data Analysis: An International Journal, 2016 (To Appear).
- [J5] **Jundong Li**, Aibek Adilmagambetov, M. Shazan M. Jabbar, Osmar R. Zaiane, Alvaro Osornio-Vargas and Osnat Wine. “On Discovering Co-Location Patterns in Datasets: A Case Study of Pollutants and Child Cancers”, Geoinformatica, 20(4), 651-692, 2016.
- [J6] Ling Jian, Shuqian Shen, **Jundong Li**, Xijun Liang and Lei Li. “Budget Online Learning Algorithm for Least Squares SVM”, IEEE Transactions on Neural Networks and Learning Systems (TNNLS), 2016 (To Appear).
- REFEREED CONFERENCE PUBLICATIONS
- [C1] Harsh Dani, **Jundong Li**, Huan Liu. “Sentiment Informed Cyberbullying Detection in Social Media”, In Proceedings of the 2017 European Conference on Machine Learning and Principles and Practice of Knowledge Discovery (ECML-PKDD). Sept 18-22, 2017, Skopje, Macedonia.
- [C2] Kewei Cheng*, **Jundong Li***, Huan Liu. (* equally contributed) “Unsupervised Feature Selection in Signed Social Networks”, In Proceedings of the 23rd ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD). Aug 13-17, 2017, Halifax, Canada.
- [C3] **Jundong Li**, Harsh Dani, Xia Hu, Huan Liu. “Radar: Residual Analysis for Anomaly Detection in Attributed Networks”, In Proceedings of the 26th International Joint Conference on Artificial Intelligence (IJCAI). Aug 19-25, 2017, Melbourne, Australia.

- [C4] **Jundong Li**, Jiliang Tang, Huan Liu. “Reconstruction based Unsupervised Feature Selection: An Embedded Approach”, In Proceedings of the 26th International Joint Conference on Artificial Intelligence (IJCAI). Aug 19-25, 2017, Melbourne, Australia.
- [C5] **Jundong Li**, Liang Wu, Osmar R. Zaiane, Huan Liu. “Personalized Relational Learning”, In Proceedings of the 17th SIAM International Conference on Data Mining (SDM). Apr 27-29, 2017, Houston, USA.
- [C6] Liang Wu, **Jundong Li**, Xia Hu, Huan Liu. “Gleaning Wisdom From The Past: Early Detection of Emerging Rumors in Social Media”, In Proceedings of the 17th SIAM International Conference on Data Mining (SDM). Apr 27-29, 2017, Houston, USA.
- [C7] Xiao Huang, **Jundong Li**, Xia Hu. “Accelerated Attributed Network Embedding”, In Proceedings of the 17th SIAM International Conference on Data Mining (SDM). Apr 27-29, 2017, Houston, USA.
- [C8] Yilin Wang, Jiliang Tang, **Jundong Li**, Baoxin Li, Yali Wan, Clayton Mellina, Neil O’Hare, Yi Chang. “Understanding and Discovering Deliberate Self-harm Content in Social Media”, In Proceedings of the 26th International World Wide Web Conference (WWW). Apr 3-7, 2017, Perth, Australia.
- [C9] Kewei Cheng, **Jundong Li**, Jiliang Tang, Huan Liu. “Unsupervised Sentiment Analysis with Signed Social Networks”, In Proceedings of the 31st AAAI Conference on Artificial Intelligence (AAAI), Feb 4-9, 2017, San Francisco, CA, USA.
- [C10] Xiao Huang, **Jundong Li**, Xia Hu. “Label Informed Attributed Network Embedding”, In Proceedings of the 10th ACM International Conference on Web Search and Data Mining (WSDM). Feb 6-10, 2017, Cambridge, UK.
- [C11] **Jundong Li**, Xia Hu, Ling Jian, Huan Liu. “Toward Time-Evolving Feature Selection on Dynamic Networks”, In Proceedings of the 16th IEEE International Conference on Data Mining (ICDM). Dec 12-15, 2016, Barcelona, Spain.
- [C12] Kewei Cheng, **Jundong Li**, Huan Liu. “FeatureMiner: A Tool for Interactive Feature Selection” (demo), In Proceedings of the 25th ACM International Conference on Information and Knowledge Management (CIKM). Oct 24-28, 2016, Indianapolis, USA.
- [C13] **Jundong Li***, Ling Jian*, Kai Shu, Huan Liu. (* equally contributed) “Multi-Label Informed Feature Selection”, In Proceedings of the 25th International Joint Conference on Artificial Intelligence (IJCAI). Jul 9-15, 2016, New York, USA.
- [C14] **Jundong Li**, Xia Hu, Liang Wu, Huan Liu. “Unsupervised Streaming Feature Selection in Social Media”, In Proceedings of the 16th SIAM International Conference on Data Mining (SDM). May 5-7, 2016, Miami, USA.
- [C15] **Jundong Li**, Xia Hu, Jiliang Tang, Huan Liu. “Unsupervised Streaming Feature Selection in Social Media”, In Proceedings of the 24th ACM International Conference on Information and Knowledge Management (CIKM). Oct 19-23, 2015, Melbourne, Australia.
- [C16] **Jundong Li**, Osmar R. Zaiane “Associative Classification with Statistically Significant Positive and Negative Rules”, In Proceedings of the 24th ACM International Conference on Information and Knowledge Management (CIKM). Oct 19-23, 2015, Melbourne, Australia.

- [C17] **Jundong Li**, Osmar R. Zaïane, Alvaro Osornio-Vargas. “Discovering Statistically Significant Co-location Rules in Datasets with Extended Spatial Objects”, In Proceedings of the 16th International Conference on Data Warehousing and Knowledge Discovery (DaWaK). Sep 2-4, 2014, Munich, Germany.
- [C18] **Jundong Li**, Jörg Sander, Ricardo G.J.B. Campello, Arthur Zimek. “Active Learning Strategies for Semi-supervised DBSCAN”, In Proceedings of the 27th Canadian Conference on Artificial Intelligence (AI). May 6-9, 2014, Montreal, Canada.

TEACHING EXPERIENCES **Teaching Assistant, Computer Science, ASU** Aug 2014 - Dec 2014

- CSE 205: Object-oriented programming and data structures
- CSE 412: Database management

Teaching Assistant, Computing Science, UAlberta Sep 2012 - May 2013

- CMPUT 174: Introduction to the foundations of computation I

INVENTION DISCLOSURES • M16-052P: Systems and Methods for Unsupervised Streaming Feature Selection in Social Media (2016)

- M17-146P: Sentiment Informed Cyberbullying Detection in Social Media (2017)

HONORS AND AWARDS • SIGKDD Student Travel Award 2017

- University Graduate Fellowship, ASU 2017
- SDM Student Travel Award 2017
- CIDSE Department Nomination for Microsoft Fellowship, ASU 2016
- ICDM Student Travel Award 2016
- CIKM Student Travel Award 2015
- GSA Professional Development Award, UAlberta 2014
- FGSR Travel Award, UAlberta 2014
- Computing Science Department GPA Award, UAlberta 2014
- CS Department Nomination for BMO Scholarship, UAlberta 2013

PRESENTATIONS & TALKS • “Toward Personalized Relational Learning”, in SDM conference, Houston, USA, 2017.

- “Toward Time-Evolving Feature Selection on Dynamic Networks”, in ICDM conference, Barcelona, Spain, 2016.
- “Understanding and Predicting Delay in Reciprocal Relations”, in Yahoo! Research, Sunnyvale, USA, 2016.
- “Dynamic Attributed Network Embedding”, in Yahoo! Research, Sunnyvale, USA, 2016.
- “Multi-Label Informed Feature Selection”, in IJCAI conference, New York, USA, 2016.
- “Robust Unsupervised Feature Selection on Networked Data”, in SDM conference, Miami, USA, 2016.
- “Unsupervised Streaming Feature Selection in Social Media”, in CIKM conference, Melbourne, Australia, 2015.
- “Associative Classification with Statistically Significant Positive and Negative Rules”, in CIKM conference, Melbourne, Australia, 2015.
- “Active Learning Strategies for Semi-supervised DBSCAN”, in Canadian AI conference, Montreal, Canada, 2014.

SERVICE **Conference Session Chair:**

- 2017 SIAM International Conference on Data Mining, CP 16: Optimization Methods

Program Committee:

- AAAI Conference on Artificial Intelligence (AAAI), 2018
- ACM International Conference on Information and Knowledge Management (CIKM), 2017
- International Joint Conference on Artificial Intelligence (IJCAI), 2017
- IEEE International Conference on Big Data (BigData), Special Session on Intelligent Data Mining, 2017

Journal Reviewer:

- Journal of Machine Learning Research (JMLR)
- Machine Learning Journal (MLJ)
- IEEE Transactions on Knowledge and Data Engineering (TKDE)
- IEEE Transactions on Big Data (TBD)
- IEEE Intelligent System (IS)
- IEEE Transactions on Multimedia (TMM)
- IEEE Transactions on Image Processing (TIP)
- IEEE Transactions on Industrial Electronics (TIE)
- ACM Transactions on Knowledge Discovery from Data (TKDD)
- Data Mining and Knowledge Discovery (DMKD)
- Knowledge and Information Systems (KAIS)
- Pattern Recognition (PR)
- Neurocomputing (NEUCOM)
- Journal of Computer Science and Technology (JCST)
- Frontiers in Disaster Communications

Conference External Reviewer:

- AAAI Conference on Artificial Intelligence (AAAI), 2016, 2017
- International Joint Conference on Artificial Intelligence (IJCAI), 2015
- ACM International Conference on Information and Knowledge Management (CIKM), 2016
- ACM International Conference on Web Search and Data Mining (WSDM), 2016, 2017
- ACM International Conference on World Wide Web (WWW), 2015, 2016
- ACM Conference on Recommender Systems (Recsys), 2015
- SIAM International Conference on Data Mining (SDM), 2015, 2016, 2017
- IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM), 2015, 2016, 2017
- Asian Conference on Machine Learning (ACML), 2016
- International Conference on Healthcare Informatics (ICHI), 2015

Conference Volunteer:

- ACM SIGKDD Conferences on Knowledge Discovery and Data Mining (KDD), 2016, 2017

REFERENCES

Available upon requests