

# Meng Jiang

---

CONTACT INFORMATION	Office 2130, Siebel Center for Computer Science University of Illinois at Urbana-Champaign 201 N Goodwin Ave, Urbana, IL 61801, USA Google Scholar: #citation = 612 (404 as the first author), h-index = 10 • <a href="https://scholar.google.com/citations?user=LZIPfCkAAAAJ">https://scholar.google.com/citations?user=LZIPfCkAAAAJ</a>	Mobile: (+1) (217) 418 6072 E-mail: <a href="mailto:mjiang89@gmail.com">mjiang89@gmail.com</a> <a href="http://www.meng-jiang.com">http://www.meng-jiang.com</a>
RESEARCH INTERESTS	<b>Data mining, behavior modeling, social network analysis, and text mining</b> My research focuses on <i>Data-driven Behavioral Analytics</i> . • Research problems: Modeling behaviors of <i>unstructured</i> content, <i>social</i> context, <i>spatiotemporal</i> context, and user intentions ( <i>suspiciousness</i> ); • Applications: prediction, recommendation, (event) summarization, fraud/spam detection.	
JOB EXPERIENCE	<b>University of Illinois at Urbana-Champaign, IL, US</b> • Postdoctoral Research Associate in Data Mining Group, Computer Science • Advisor: Professor Jiawei Han  <b>University of Maryland, College Park, MD, US</b> • Visiting Researcher in Institute for Advanced Computer Studies • Advisor: Professor V.S. Subrahmanian	August 2015 – Present  June 2016 – July 2016
EDUCATION EXPERIENCE	<b>Tsinghua University, Beijing, China</b> • Ph.D. of Engineering with <i>Dissertation Award</i> in Computer Science • Advisor: Professor Shiqiang Yang • Thesis: Modeling complex behaviors in social media  <b>Carnegie Mellon University, Pittsburgh, PA, US</b> • Visiting Ph.D. Student in Database Group, Computer Science • Advisor: Professor Christos Faloutsos  <b>Tsinghua University, Beijing, China</b> • Bachelor of Engineering with <i>Excellent Thesis Award</i> in Computer Science • Thesis: Reranking news feed in social recommender systems	August 2010 – July 2015  August 2012 – May 2013  August 2006 – July 2010
REFEREED JOURNAL PUBLICATIONS	<p>[J7] <b>Meng Jiang</b>, Alex Beutel, Peng Cui, Bryan Hooi, Shiqiang Yang and Christos Faloutsos. “Spotting Suspicious Behaviors in Multimodal Data: A General Metric and Algorithms”, in IEEE Transactions on Knowledge and Data Engineering (<b>TKDE</b>), 2016.</p> <p>[J6] <b>Meng Jiang</b>, Peng Cui and Christos Faloutsos. “Suspicious Behavior Detection: Current Trends and Future Directions”, Special Issue on Online Behavioral Analysis and Modeling, in <b>IEEE Intelligent Systems</b>, 2016.</p> <p>[J5] <b>Meng Jiang</b>, Peng Cui, Alex Beutel, Christos Faloutsos and Shiqiang Yang. “Catching Synchronized Behaviors in Large Networks: A Graph Mining Approach”, Special Issue on the Best of SIGKDD 2014, in ACM Transactions on Knowledge Discovery from Data (<b>TKDD</b>), 2016.</p> <p>[J4] <b>Meng Jiang</b>, Peng Cui, Alex Beutel, Christos Faloutsos and Shiqiang Yang. “Inferring Lockstep Behavior from Connectivity Pattern in Large Graphs”, in Knowledge and Information Systems (<b>KAIS</b>), 2015.</p> <p>[J3] <b>Meng Jiang</b>, Peng Cui, Xumin Chen, Fei Wang, Wenwu Zhu and Shiqiang Yang. “Social Recommendation with Cross-Domain Transferable Knowledge”, in IEEE Transactions on Knowledge and Data Engineering (<b>TKDE</b>), 2015.</p>	

[J2] **Meng Jiang**, Peng Cui, Fei Wang, Wenwu Zhu and Shiqiang Yang. “Scalable Recommendation with Social Contextual Information”, in IEEE Transactions on Knowledge and Data Engineering (**TKDE**), 2014. (#citation = **45**)

[J1] Lu Liu, Feida Zhu, **Meng Jiang**, Jiawei Han, Lifeng Sun and Shiqiang Yang. “Mining Diversity on Social Media Networks”, in Multimedia Tools and Applications (**MTA**), 2012.

[C13] Kun Kuang, Peng Cui, Bo Li, **Meng Jiang**, Shiqiang Yang and Fei Wang. “Treatment Effect Estimation with Data-Driven Variable Decomposition”, in AAAI Conference on Artificial Intelligence (**AAAI**), 2017. (Acceptance rate = 25%)

[C12] Kun Kuang, **Meng Jiang**, Peng Cui, Shiqiang Yang. “Steering Social Media Promotions with Effective Strategies”, in IEEE International Conference on Data Mining (**ICDM**), 2016. (Short, acceptance rate = 20%)

[C11] Huan Gui, Jialu Liu, Fangbo Tao, **Meng Jiang**, Brandon Norick, Jiawei Han. “Large-Scale Embedding Learning in Heterogeneous Event Data”, in IEEE International Conference on Data Mining (**ICDM**), 2016. (Short, acceptance rate = 20%)

[C10] **Meng Jiang**, Christos Faloutsos and Jiawei Han. “CatchTartan: Representing and Summarizing Dynamic Multicontextual Behaviors”, in ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (**KDD**), 2016. (Oral presentation, acceptance rate = 9%)

[C9] **Meng Jiang**, Peng Cui, Nicholas Jing Yuan, Xing Xie and Shiqiang Yang. “Little is Much: Bridging Cross-Platform Behaviors through Overlapped Crowds”, in AAAI Conference on Artificial Intelligence (**AAAI**), 2016. (Acceptance rate = 25%)

[C8] **Meng Jiang**, Alex Beutel, Peng Cui, Bryan Hooi, Shiqiang Yang and Christos Faloutsos. “A General Suspiciousness Metric for Dense Blocks in Multimodal Data”, in IEEE International Conference on Data Mining (**ICDM**), 2015. (Short, acceptance rate = 18%, #citation = **20**)

[C7] **Meng Jiang**, Peng Cui, Alex Beutel, Christos Faloutsos and Shiqiang Yang. “Catch-Sync: Catching Synchronized Behavior in Large Directed Graphs”, in ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (**KDD**), 2014. (Acceptance rate = 15%, #citation = **44**, selected as one of the **best paper finalists**)

[C6] **Meng Jiang**, Peng Cui, Fei Wang, Xinran Xu, Wenwu Zhu and Shiqiang Yang. “FEMA: Flexible Evolutionary Multi-faceted Analysis for Dynamic Behavioral Pattern Discovery”, in ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (**KDD**), 2014. (Acceptance rate = 15%, #citation = **21**)

[C5] **Meng Jiang**, Peng Cui, Alex Beutel, Christos Faloutsos and Shiqiang Yang. “Inferring Strange Behavior from Connectivity Pattern in Social Networks”, in Pacific-Asia Conference on Knowledge Discovery and Data Mining (**PAKDD**), 2014. (Oral presentation, acceptance rate = 11%, #citation = **32**)

[C4] **Meng Jiang**, Peng Cui, Alex Beutel, Christos Faloutsos and Shiqiang Yang. “Detecting Suspicious Following Behavior in Multimillion-Node Social Networks”, in International Conference on World Wide Web Companion (**WWW**), 2014. (Poster, #citation = **19**)

[C3] **Meng Jiang**, Peng Cui, Fei Wang, Qiang Yang, Wenwu Zhu and Shiqiang Yang. “Social Recommendation across Multiple Relational Domains”, in ACM International Conference on Information and Knowledge Management (**CIKM**), 2012. (Acceptance rate = 14%, #citation = **52**, the 9<sup>th</sup> most cited in 146 accepted CIKM’12 papers)

	<p>[C2] <b>Meng Jiang</b>, Peng Cui, Rui Liu, Qiang Yang, Fei Wang, Wenwu Zhu and Shiqiang Yang. “Social Contextual Recommendation”, in ACM International Conference on Information and Knowledge Management (<b>CIKM</b>), 2012. (Acceptance rate = 14%, #citation = <b>133</b>, the 3<sup>rd</sup> most cited in 146 accepted CIKM’12 papers)</p> <p>[C1] Lu Liu, Jie Tang, Jiawei Han, <b>Meng Jiang</b> and Shiqiang Yang. “Mining Topic-Level Influence in Heterogeneous Networks”, in ACM International Conference on Information and Knowledge Management (<b>CIKM</b>), 2010. (#citation = <b>200</b>)</p>
BOOK CHAPTERS	<p>[B2] <b>Meng Jiang</b>. “Behavior Modeling in Social Networks”, in “Encyclopedia of Social Network Analysis and Mining”, 2nd edition, Springer, 2016.</p> <p>[B1] <b>Meng Jiang</b> and Peng Cui. “Mining User Behaviors in Large Social Networks”, in “Big Data in Complex and Social Networks”, Chapman and Hall/CRC Big Data Series, 2016.</p>
TUTORIALS	<p>[T4] Xiang Ren, <b>Meng Jiang</b>, Jingbo Shang, and Jiawei Han. “Building Structured Databases of Factual Knowledge from Massive Text Data”, in ACM SIGMOD International Conference on Management of Data (<b>SIGMOD</b>), 2017. (to appear)</p> <p>[T3] Xiang Ren, <b>Meng Jiang</b>, Jingbo Shang, and Jiawei Han. “Constructing Structured Information Networks from Massive Text Corpora”, in International World Wide Web Conference (<b>WWW</b>), 2017. (to appear)</p> <p>[T2] <b>Meng Jiang</b>, Peng Cui and Jiawei Han. “Data-Driven Behavioral Analytics: Observations, Representations and Models”, in ACM International Conference on Information and Knowledge Management (<b>CIKM</b>), 2016. (Taught 2 of 3 hours, 70+ audience and \$360 honorarium)</p> <p>[T1] <b>Meng Jiang</b> and Peng Cui. “Behavior Modeling in Social Networks: From Micro to Macro”, in IEEE International Conference on Data Mining (<b>ICDM</b>), 2015. (Taught all 3 hours, 50+ audience and \$700 honorarium)</p>
WORKSHOP PAPER	<p>[W1] <b>Meng Jiang</b>. “Catching Social Media Advertisers with Strategy Analysis”, in the 1st International Workshop on Computational Methods for <b>CyberSafety</b>, ACM International Conference on Information and Knowledge Management (<b>CIKM</b>), 2016.</p>
GRANT PROPOSAL WRITING	<p>I participated in multiple proposal writing. Most are under evaluation. One got funded:</p> <p>[G1] “NSF III: Small: Multi-Dimensional Structuring, Summarizing and Mining of Social Media Data”, National Science Foundation Award Number: NSF IIS 16-18481 (08-01-2016 – 07-31-2019, \$500,000). Jiawei Han, PI. <b>Meng Jiang</b> contributed significantly to the technical content.</p>
INVITED TALKS	<p>[K8] “Data-driven Behavioral Analytics with Networks”, at Rensselaer Polytechnic Institute, February 21, 2017. (Host by Professor Boleslaw K. Szymanski)</p> <p>[K7] “Data-driven Behavioral Analytics with Networks”, at University of Maryland, Baltimore County, February 2, 2017. (Host by Professor George Karabatis)</p> <p>[K6] “Data-driven Behavioral Analytics with Networks”, at University of Notre Dame, January 26, 2017. (Host by Professor Nitesh Chawla)</p> <p>[K5] “Data-driven Behavioral Analytics with Networks”, at Temple University, January 19, 2017. (Host by Professor Zoran Obradovic)</p> <p>[K4] “Data-driven Behavioral Analytics with Networks”, at The Ohio State University, October 25, 2016. (Invited by Professor Huan Sun)</p>

[K3] “Modeling Complex Behavior in Social Media”, at University of Massachusetts Boston, November 23, 2015. (Invited by Professor Wei Ding)

[K2] “Prediction and Anomaly Detection in Large-Scale Social Networks”, at Tencent Big Data Seminar, July 25, 2014. (Invited by Tencent Inc.)

[K1] “User Behavior Analysis in Social Networks: Pattern Discovery, Prediction and Anomaly Detection”, at Microsoft Research Asia, July 14, 2014. (Invited by Senior Research Manager Dr. Xing Xie)

#### MAJOR PROJECT EXPERIENCE

**NSF IIS 16-18481:** Multi-Dimensional Structuring, Summarizing and Mining of Social Media Data August 2016 – Present

- Major supported member. Contributed significantly to the proposal writing.

**NS CTA I4:** Distributed, User-Oriented Multi-Scale Network Summarization and Online Analytical Processing August 2015 – Present

- Visited U.S. Army Research Lab at Aberdeen Proving Ground in June 2016 – July 2016. Collaborated with Dr. Timothy P. Hanratty, Dr. John Richardson and Heather Roy.

**NS CTA I1:** Constructing Unified, Structured Knowledge Networks by Integrating Text, Social Media and Multi-Genre Networks August 2015 – Present

- Visited U.S. Army Research Lab at Adelphi Laboratory Center in June 2016 – July 2016. Collaborated with Dr. Lance M. Kaplan and Dr. Taylor Cassidy.

**MSRA Intern:** Cross-Platform Behavior Modeling June 2014 – August 2014

- Developed a cross-platform transfer learning model. Published in AAAI 2016.
- Mentor: Dr. Xing Xie. Won *Award of Excellence* in MSRA Internship Program.

**Tsinghua-Tencent Lab:** Mining Rich Social Media Data July 2011 – July 2015

- Deployed social recommender systems in Weibo News Feed. Improved the conversion rate (i.e., number of retweets per request) from 5.78% to 8.27% (relatively 43%).
- Developed a scalable algorithm to detect fake accounts. Won KDD’14 *Best Paper Finalist*.

#### TEACHING EXPERIENCE

**UIUC CS512:** Data Mining: Principles and Algorithms Spring 2017

- Guest lecture on data-driven behavioral analytics. Invited by Professor Jiawei Han.

**UIUC CS412:** An Introduction to Data Warehousing and Data Mining Fall 2016

- Taught for 200+ undergraduates occasionally (e.g., Data Warehousing and OLAP chapter, Data Cube chapter) when the Instructor Professor Jiawei Han was out of town.
- Supervised three teams (24 students) in the “Triple Scoring” project. Provided three promising solutions and a complementary dataset.

**UIUC CS598:** Advanced Topics in Information Retrieval Fall 2016

- Guest lecture on automatic attribute discovery. Invited by Professor ChengXiang Zhai.

**UIUC CS512:** Data Mining: Principles and Algorithms Spring 2016

- Supervised three teams (9 graduates) in the “Relationship Prediction” project.

**THU CS-SMT:** Streaming Media Technology Fall 2013

- Teaching assistant for over 50 graduate students.

**THU CS-MFA:** Multimedia Fundamentals and Applications Spring 2013

- Teaching assistant for over 160 undergraduate students.

#### MENTORED STUDENTS

**Kun Kuang:** Promotional strategy analysis in social media 2014 – 2016

- Ph.D. student at Tsinghua.
- Supervised in *ICDM 2016* and *AAAI 2017* papers.



**External Reviewer:** PKDD 2016, EDBT 2016, AAAI 2016, KDD 2015, IJCAI 2015, AAAI 2015, WSDM 2015, ICDM 2014, CIKM 2014, KDD 2014, Globecom 2014  
**Volunteer:** KDD 2014

## REFERENCES

**Professor Shiqiang Yang:** my Ph.D. advisor

Affiliation: Department of Computer Science and Technology, Tsinghua University, Haidian, Beijing 100084, China

E-mail: yangshq@tsinghua.edu.cn

Phone: +86-10-62771978

**Abel Bliss Professor Jiawei Han:** my postdoctoral training advisor

Affiliation: Department of Computer Science, University of Illinois at Urbana-Champaign, IL 61801, USA

E-mail: hanj@cs.uiuc.edu

Phone: (217) 333-6903

**Professor Christos Faloutsos:** my advisor when I was a visiting Ph.D. student

Affiliation: Department of Computer Science, Carnegie Mellon University, Pittsburgh, PA 15213, USA

E-mail: christos-admin-support@cs.cmu.edu

Phone: (412) 268-1457

**Assistant Professor Fei Wang:** advised me in six collaborative publications

Affiliation: Department of Healthcare Policy and Research, Weill Cornell Medical School, Cornell University, New York, NY 10065, USA

E-mail: feiwang03@gmail.com

Phone: (646) 962-9405

Additional references available upon request.

(Last updated on February 25, 2017)