Weimao Ke

Associate Professor of Information Science

College of Computing & Informatics	Phone:	(215) 895-5912
Drexel University	Fax:	(215) 895-2494
3141 Chestnut St	Email:	wk@drexel.edu
Philadelphia, PA 19104	Homepage:	https://lincs.cci.drexel.edu/

Education

Ph.D. Information Science, University of North Carolina at Chapel Hill, 2010.

M.A. Information Science, Indiana University Bloomington, 2006.

B.E. Chemical Engineering, East China University of Science & Technology, 1998.

Employment

Associate Professor, September 2016 -Associate Department Head for Graduate Affairs, September 2021 -Information Science, College of Computing and Informatics, Drexel University, Philadelphia PA

Assistant Professor, Information Science, College of Computing and Informatics, Drexel University, Philadelphia PA, September 2010 - August 2016.

Adjunct Instructor, School of Information and Library Science, University of North Carolina, Chapel Hill NC, 2009.

Research Assistant, School of Information and Library Science, University of North Carolina, Chapel Hill NC, 2007 - 2010.

Research Assistant, School of Library and Information Science, Indiana University, Bloomington IN, 2004 - 2007.

Technical Director, ManguIce Ltd Shanghai, Shanghai China, 2002 - 2003

Project Manager, eBay China, Shanghai China, 2002.

Regional Manager, Software Development, Lycos (Asia) China, Shanghai China, 1999 - 2002.

Software Engineer, Great-Wall eInfoNet, Shanghai China, 1998 - 1999.

Grants

PI. Library Chat Transcripts and Topic Modeling Techniques. Subaward from UNI, 2022.

Co-PI, LEADING: LIS Education And Data science-Integrated Network Group, \$887,154 from IMLS, 2020 - 2023.

Co-PI, BIGDATA: Predictive Analytics of Driver's Engagement for Injury Prevention, \$1 million from NSF, 2018 - 2022.

Co-PI, LEADS: Library Education and Data Science, \$313,269 from IMLS, 2017 - 2019.

PI, EAGER: Studying Decentralized Searches in Large-scale Agent Networks, \$99,940 from NSF, 2016 - 2017.

Co-PI, Large-scale Social Media Analytical Tools with Application to Detecting Emerging Events, \$68,200 from NSF I/UCRC Center for Visual and Decision Informatics, 2013 - 2014. (with Prof. Tony Hu)

Senior personnel, *Exploring Common Tools for Meaningful Concept Displays (MCD) to Support Semantic Indexing, Searching, and Learning across Libraries, Museums, and Archives, National Leadership Grant (\$413,378) from the Institute of Museum and Library Services (IMLS), 2012 - 2015. (with Prof. Xia Lin as PI)*

Honors and Awards

CASTLE Instructor of the Week, Drexel University, Philadelphia PA, 2018

Recipient of the Outstanding Online Faculty Award, Drexel University, Philadelphia PA, 2013

Nominee for the Vannevar Bush Best Paper Award, ACM&IEEE JCDL, Indianapolis IN, 2013

Research Scholarship (tuition+stipend), University of North Carolina, Chapel Hill NC, 2007 - 2010

SIG/Scientific & Technical Information CAS Student Award (\$1000), ASIS&T, Columbus OH, 2008

Best Paper award nominee, International Conf on Weblog & Social Media, AAAI, Boulder CO, 2007

Research Scholarship (tuition+stipend), SLIS, Indiana University, Bloomington IN, 2006 - 2007

Merit Scholarship (tuition+stipend), Indiana University, Bloomington IN, 2004 - 2006

National Chancellor's List, Indiana University, Bloomington IN, 2005

Honorable mention, InfoVis 2005 Contest, IEEE, Minneapolis MN, 2005

Student Showcase Award, University Information Technology Services, Bloomington IN 2005, 2006

First Place Award (of 18 teams internationally), InfoVis 2004 Contest, IEEE, Austin TX, 2004

Publications

Peer-reviewed Book Chapters

- 2. Weimao Ke (2012). Decentralized Search and the Clustering Paradox in Large Scale Information Networks. In C. Jouis, I. Biskri, J.G. Ganascia, & M. Roux (Eds.), *Next Generation Search Engines: Advanced Models for Information Retrieval* (pp. 29-46). IGI Global.
- 1. Javed Mostafa, Kazuhiro Seki, and Weimao Ke (2009). Beyond Information Retrieval: Literature Mining for Biomedical Knowledge Discovery. In J.Y. Chen, S. Lonardi, and R. Cohen (Eds.), *Biological Data Mining* (pp. 449-485). Chapman and Hall/CRC Press.

Peer-reviewed Journal Articles

- 14. Yao Cai, Weimao Ke, Eric Cui, and Fei Yu (2022). Deep Recommendation Model of Cross-grained Sentiments of User Reviews and Ratings. *Information Processing and Management* 5(2), pp. 1-17. March 2022. DOI: https://doi.org/10.1016/j.ipm.2021.102842 (Impact Factor: 7.5)
- 13. Jianxin Wang, Jianliang Gao, Tengfei Lyu, Xiong Fan, Weimao Ke, and Lizhao Lz (2021). Predicting the Survival of Cancer Patients with Multimodal Graph Neural Network". IEEE/ACM Transactions on Computational Biology and Bioinformatics. Published: Link to Publication (Impact Factor: 3.7)
- Yongping Du, Jingxuan Liu, Weimao Ke, and Xuemei Gong (2018). Hierarchy construction and text classification based on the relaxation strategy and least information model. *Expert Systems with Applications*, 100, pp. 157 - 164, 2018. (Impact Factor: 8.7)
- 11. Jianliang Gao, Bo Song, Weimao Ke, and Xiaohua Hu (2017). BalanceAli: Multiple PPI Network Alignment with Balanced High Coverage and Consistency. *IEEE Transactions on NanoBioscience*, pp 1536-1241. IEEE. (Impact Factor: 2.9))
- Weimao Ke (2015). Information-theoretic Term Weighting Schemes for Document Clustering and Classification. *International Journal on Digital Libraries* 16(2), pp 145-159. Springer, Berlin Heidelberg. (Source Normalized Impact Factor: 1.6)
- Yan Zhang, Ramona Broussard, Weimao Ke, and Xuemei Gong (2014). Evaluation of a Scatter/Gather Interface for Supporting Distinct Health Information Search Tasks. *Journal of American Society for Information Science and Technology* 65(5), pp. 1028-1041, May 2014. (#3 IR journal per MS Academic and #1 LIS journal per Google Scholar, Impact Factor: 2.7)
- 8. Juan Fang, Jing Wang, Chengyan Li, Zhicheng Yao, and Weimao Ke (2014). Partition-based Cache Replacement to Manage Shared L2 Caches. Chinese Journal of Electronics 23(3), pp. 464-467. CIE.
- 7. Weimao Ke and Javed Mostafa (2013). Studying the Clustering Paradox and Scalability of Search in Highly Distributed Environments. *ACM Transactions on Information Systems*, 31(2), pp. 8:1-8:36. ACM Press. (10% acceptance, #1 IR journal per MS Academic, Impact Factor: 4.8)
- 6. Weimao Ke (2013). A Fitness Model for Scholarly Impact Analysis. *Scientometrics*, 94(3), pp. 981-998. OnlineFirst July 2012. Springer. (**#2 LIS** journal per Google Scholar, Impact Factor: **2.207**)
- Gavin LaRowe, Sumeet Ambre, John Burgoon, Weimao Ke, and Katy Börner (2008). The Scholarly Database and Its Utility for Scientometrics Research. *Scientometrics*, 79(2), pp. 219-234. Springer. (#2 LIS journal per Google Scholar, Impact Factor: 3.2)
- Katy Börner, Shashikant Penumarthy, Mark Meiss, and Weimao Ke (2006). Mapping the Diffusion of Information among Major U.S. Research Institutions. *Scientometrics*, 68(3), pp. 415-426. Springer. (#2 LIS journal per Google Scholar, Impact Factor: 3.2)
- 3. Marco Janssen, Michael Schoon, Weimao Ke, and Katy Börner (2006). Literature analysis on Resilience, Vulnerability and Adaptation. *Global Environmental Change, special issue on Resilience, Vulnerability and Adaptation, 16*(3), pp. 240-252. Elsevier. (Impact Factor: 11.2)
- Weimao Ke, Yueyu Fu and Javed Mostafa (2005). Advanced information retrieval Web services for digital libraries. *Library Collections, Acquisitions, and Technical Services*, 29(2), pp. 220-224. Elsevier. (Impact Factor: 0.737)
- Katy Börner, Luca Dallsta, Weimao Ke, and Alessandro Vespignani (April 2005). Studying the Emerging Global Brain: Analyzing and Visualizing the Impact of Co-Authorship Teams. *Complexity, special issue on Understanding Complex Systems,* 10(4), pp. 58-67. Wiley. (Impact Factor: 2.83)

Conference and Other Research Papers

- 37. Javed Mostafa and Weimao Ke (2022). Collaboration, Self-Reflection, and Adaptation in Robot Communities: Using Multi-Agent Distributed Learning for Coordination Planning. To appear in *IEEE Third International Conference on Cognitive Machine Intelligence*, Les Vegas.
- 36. Weimao Ke (2022). Alternatives to Classic BM25-IDF based on a New Information-theoretical Framework. To appear in *IEEE Big Data 2022 Conference*. Osaka, Japan. (**19**% acceptance)
- 35. Jianliang Gao, Tengfei Lyu, Fan Xiong, Jianxin Wang, Weimao Ke, Zhao Li (2020). MGNN: A Multimodal Graph Neural Network for Predicting the Survival of Cancer Patients. In Proceedings of the 43rd International ACM SIGIR Conference on Research and Development in Information Retrieval, pp. 1697 - 1700. Xi'an, China.
- 34. Christopher Yang, Ou Liang, Santiago Ontanon, Weimao Ke, Helen Loeb, Charlie Klauer (2018). Predictive modeling with vehicle sensor data and IoT for injury prevention. In *IEEE 4th International Conference on Collaboration and Internet Computing (CIC)*, pp. 293 - 298. IEEE.
- 33. Weimao Ke (2018). Visual Analysis of Distributed Search Traffic in a Peer-to-peer Network. In *The 10th International Conference on Communication Software and Networks (ICCSN)*, pp 189 194. IEEE.
- 32. Xi Niu, Wlodek Zadrozny, Kazjon Grace, and Weimao Ke (2018). Computational surprise in information retrieval. *The 41st International ACM SIGIR Conference on Research & Development in Information Retrieval*, pp. 1427 - 1429. Ann Arbor, MI.
- 31. Weimao Ke (2017). Text Retrieval based on Least Information Measurement. In *ICTIR 2017: Proceedings of the ACM SIGIR International Conference on Theory of Information Retrieval*, pp. 125-132. October 2017. Amsterdam, Netherlands.
- 30. Jianliang Gao, Bo Song, Zheng Chen, Weimao Ke, Wanying Ding, and Xiaohua Hu (2020). Counter Deanonymization Query: H-index Based k-Anonymization Privacy Protection for Social Networks. In ACM SIGIR '17: Proceedings of the 40th annual international conference on research and development in information retrieval, pp. 809–812. Tokyo, Japan. August 2017.
- 29. Weimao Ke (2017). Distributed Search Efficiency and Robustness in Service-oriented Multi-agent Systems. In the 2017 International Conference on Management Engineering, Software Engineering and Service Sciences, 1-10. Wuhan, China.
- 28. Weimao Ke and Javed Mostafa (2016). Scalability Analysis of Distributed Search in Large Peer-topeer Networks. In the 2016 IEEE International Conference on Big Data (BigData'16), 1-6. Washington, DC. (19% acceptance)
- 27. Bo Song, Jianliang Gao, Weimao Ke, and Xiaohua Hu (2016). Achieving High k-Coverage and k-Consistency in Global Alignment of Multiple PPI Networks. In the 2016 IEEE International Conference on Bioinformatics and Biomedicine (BIBM'16), 1-6. Shenzhen, China.
- 26. Jianliang Gao, Bo Song, Ping Liu, Weimao Ke, Jianxin Wang, and Xiaohua Hu (2016). Parallel Top-k Subgraph Query in Massive Graphs: Computing from the Perspective of Single Vertex. In the 2016 IEEE International Conference on Big Data (BigData'16), 1-10. Washington, DC. (19% acceptance)
- 25. Weimao Ke, Xiaoli Song, Sheik Hassan, and Xuemei Gong. Scalable Text Clustering with Partial Affinity Propagation on MapReduce. In ACM WSDM 2015 Workshop on Scalable Data Analytics: Theory and Applications (SDATA'15), 1-9. Shanghai, China, 2015.
- 24. Xuemei Gong and Weimao Ke. "Term Weighting for Interactive Cluster Labeling based on Least Information Gain." In ACM WSDM 2015 Workshop on Heterogeneous Information Access (HIA'15), 1-6. Shanghai, China, 2015.

- Weimao Ke (2013). Information-theoretic Term Weighting Schemes for Document Clustering. In JCDL'13: Proceedings of the ACM/IEEE Joint Conference on Digital Libraries, pp. 143-152. Indianapolis, IN. (29% acceptance, Vannevar Bush Best Paper Award nominee)
- 22. Xuemei Gong, Weimao Ke, Yan Zhang, and Ramona Broussard (2013). Interactive Search Result Clustering: A Study of User Behavior and Retrieval Effectiveness. In JCDL'13: Proceedings of the ACM/IEEE Joint Conference on Digital Libraries, pp. 167-170. Indianapolis, IN. (30% acceptance)
- 21. Xuemei Gong, Weimao Ke, and Ritu Khare (2012). Studying Scatter/Gather Browsing for Web Search. In ASIS&T'12: Proceedings of the 75th American Society for Information Science and Technology conference, pp. 1-4. Baltimore, MD.
- Weimao Ke and Xuemei Gong (2012). Collaborative Hierarchical Clustering in the Browser for Scatter/Gather on the Web. In ASIS&T'12: Proceedings of the 75th American Society for Information Science and Technology conference, pp. 1-8.
- Weimao Ke (2012). Least Information Document Representation for Automated Text Classification. In ASIS&T'12: Proceedings of the 75th American Society for Information Science and Technology conference, pp. 1-10.
- Weimao Ke and Javed Mostafa (2010). Scalability of Findability: Efficient and Effective IR Operations in Large Information Networks. In SIGIR '10: Proceedings of the 33nd annual international ACM SIGIR conference on research and development in information retrieval, pp. 74-81. Geneva, Switzerland. July 19-23, 2010. (17% acceptance)
- 17. Weimao Ke and Javed Mostafa (2009). Strong Ties vs. Weak Ties: Studying the Clustering Paradox for Decentralized Search. In *Proceedings of the 7th Workshop on Large-Scale Distributed Systems for Information Retrieval (LSDS-IRo9)* in conjunction with SIGIR '09, pp. 49-56. Boston, MA.
- Weimao Ke, Cassidy R. Sugimoto, and Javed Mostafa (2009). Dynamicity vs. effectiveness: Studying online clustering for Scatter/Gather. In SIGIR '09: Proceedings of the 32nd annual international ACM SIGIR conference on research and development in information retrieval, pp. 19-26. Boston, MA. July 19-23, 2009. (16% acceptance)
- 15. Weimao Ke and Javed Mostafa (2009). A Referral Approach to Finding Medical Informatics Reviewers. In *Proceedings of the 12th International Conference on Network-Based Information Systems*, pp. 194-199. Indianapolis, IN. August 19-21, 2009.
- 14. Weimao Ke (2009). The Rich Get Richer: Studying Scholarly Impact in the Emerging Field of Information Visualization. In *Proceedings of the Fourth Annual iSchools Conference (iConference'09)*.
- 13. Weimao Ke, Javed Mostafa, and Gayathri S. Athreya (2008). Computer Supported Workflow for Cataloging and Management in Digital Libraries. In *Proceedings of the 71st Annual Meeting of the American Society for Information Science and Technology (ASIS&T 2008)*, pp. 1-5. Columbus, OH.
- 12. Weimao Ke and Javed Mostafa (2008). Visualizing Multi-Agent Collaboration for Classification of Information. In *Proceedings of the 71st Annual Meeting of the American Society for Information Science and Technology (ASIS&T 2008)*, pp. 1-4. Columbus, OH.
- Diane Kelly, Chirag Shah, Cassidy R. Sugimoto, Earl W. Bailey, Rachael A. Clemens, Ann K. Irvine, Nicholas A. Johnson, Weimao Ke, Sanghee Oh, Anezka Poljakova, M.A. Rodriguez, M.G. van noord, and Yan Zhang. (2008). Effects of performance feedback on users' evaluations of an interactive IR system. *Proceedings of the 2nd Symposium on Information Interaction in Context (IIiX)*, London, UK. October 14-17, 2008.
- Weimao Ke and Javed Mostafa (2008). Collaborative Expertise Retrieval: A Referral Approach to Finding Distributed Experts. In *Proceedings of the SIGIR 2008 Workshop on Future Challenges in Expertise Retrieval (fCHER)*, pp. 37-40, 2008.

- Weimao Ke, Javed Mostafa, and Yong Liu (2008). Toward Responsive Visualization Services for Scatter/Gather Browsing. In *Proceedings of the 71st Annual Meeting of the American Society for Information Science and Technology (ASIS&T 2008)*, pp. 1-10. Columbus, OH.
- 8. Weimao Ke and Tiago Simas (2007). Mapping a Local Web Domain. In *Proceedings of the 11th International Conference on Information Visualisation (IV'07)*, pp. 215-218.
- Bruce W. Herr, Weimao Ke, Elisha Hardy, and Katy Börner (2007). Movies and Actors: Mapping the Internet Movie Database. In *Proceedings of the 11th International Conference on Information Visualisation* (IV'07), pp. 439-443.
- Weimao Ke, Javed Mostafa, and Yueyu Fu (2007). Collaborative Classifier Agents: Studying the Impact of Learning in Distributed Document Classification. In JCDL'07: Proceedings of the 7th ACM/IEEE-CS joint conference on digital libraries, pp. 428-437. (26% acceptance)
- 5. Gavin LaRowe, Sumeet Ambre, John Burgoon, Weimao Ke, and Katy Börner (2007). The Scholarly Database and Its Utility for Scientometrics Research. In *Proceedings of the 11th biennial International Conference on Scientometrics and Informetrics (ISSI 2007)*, June 25-27, Madrid, Spain 2007.
- 4. Kiduk Yang, Ning Yu, Alejandro Valerio, Hui Zhang, and Weimao Ke (2007). Fusion Approach to Finding Opinions in Blogosphere. In *Proceedings of the First International Conference on Weblogs and Social Media*, Boulder, Colorado, U.S.A. (Best Paper Award nominee)
- Colin Murray, Weimao Ke, and Katy Börner (2006). Mapping Author Expertise and Scientific Disciplines Based on Personal Bibliography Files. In *Proceedings of the 10th International Conference on Information Visualisation (IV'06)*, pp. 258-263.
- 2. Yueyu Fu, Javed Mostafa, and Weimao Ke (2005). Toward information retrieval Web services for digital libraries. In *Proceedings of the 68th Annual Meeting of the American Society for Information Science and Technology (ASIS&T 2005).*
- 1. Yueyu Fu, Weimao Ke, Javed Mostafa (2005). Automated text classification using a multi-agent framework. In *JCDL '05: Proceedings of the 5th ACM/IEEE-CS joint conference on digital libraries.* (33% acceptance)

Contest-winning Papers

- Colin Murray, Weimao Ke, Hana Milanov, Mark Meiss, Sharavan Rajagopal, and Katy Börner (2005). Geographical Visualization of Technology Data in the US. *The 11th IEEE Symposium on Information Visualization (INFOVIS'05)*. (Honorable mention in IEEE InfoVis 2005 Contest)
- 1. Weimao Ke, Katy Börner, and Lalitha Viswanath (2004). Major Information Visualization Authors, Papers and Topics in the ACM Library. In *Proceedings of the 10th IEEE Symposium on Information Visualization (INFOVIS'04)*. (First Place Winner of IEEE InfoVis 2004 Contest)

Invited Publications

- 2. Weimao Ke (2010). Scalability of Findability: Decentralized Search and Retrieval in Large Information Networks. *ACM SIGIR Forum*, 44(2), 86. December 2010. (**#6 IR** journal per MS Academic)
- Katy Börner and Weimao Ke (2006). Mapping the Social Network and Expertise of "Network Science" Researchers. In *Report to the U.S. National Research Council Study on Network Science*, 88-92. The National Academies Press.

Dissertation and Non-Refereed Publications

- 6. Kashti S. Umare and Weimao Ke (2022). On Triangular Inequality of the Discounted Least Information Theory of Entropy (DLITE). *Technical report: https://doi.org/10.48550/arXiv.2210.08079*.
- 5. Weimao Ke (2020). DLITE: The Discounted Least Information Theory of Entropy. Technical report: https://doi.org/10.48550/arXiv.2002.07888.
- 4. Weimao Ke (2012). Least Information Modeling for Information Retrieval. CoRR, abs/1205.0312. http://arxiv.org/abs/1205.0312.
- 3. Weimao Ke (2010). *Scalability of Findability: Decentralized Search and Retrieval in Large Information Networks*. PhD thesis, School of Information and Library Science, the University of North Carolina, Chapel Hill, NC, USA.
- 2. Weimao Ke, Cassidy R. Sugimoto, and Javed Mostafa (2008). *Dynamicity vs. Effectiveness: A User Study of a Clustering Algorithm for Scatter/Gather* (Tech. Rep. No. TR-2008-03). Chapel Hill, NC, U.S.A.: UNC SILS.
- 1. Yong Liu, Javed Mostafa, and Weimao Ke (2007, November). *A fast online clustering algorithm for Scatter/Gather browsing* (Tech. Rep. No. TR-2007-06). Chapel Hill, NC, U.S.A.: UNC SILS.

Patent

 Weimao Ke, Xiaoli Song, and Sheik Hassan (2014). Pruned Affinity Propagation: Scalable Data Clustering on MapReduce. US Provisional Patent 62/021,331 pending. (Drexel Technology ID: 14-1661D)

Teaching Experience

Drexel University

Associate Professor, College of Computing and Informatics

Recent Courses

Spring 2021: INFO 300 Information Retrieval Systems (face-to-face)

Spring 2021: INFO 153 Applied Data Management (online)

Winter 2021: INFO 552 Introduction to Web Design for Information Organizations (online)

Fall 2021: INFO 600 Web System Architecture (face-to-face and online)

Summer 2021: INFO 624-001 Information Retrieval Systems

Spring 2021: INFO 153-900 Applied Database Management

Spring 2021: INFO 634-XLIST Data Mining

Winter 2021: INFO 152-900 Web Systems and Services II

Winter 2021: INFO 600-XLIST Web System Architecture

Fall 2020: INFO 151-801 Web Systems and Services I

Fall 2020: INFO 300 Information Retrieval Systems (joint program with Lanzhou University)

Past Courses

- INFO 659: Introduction to Data Analytics, 2016 -
- INFO 655: Introduction to Web Programming, 2017 -
- INFO 634: Data Mining, 2019 -
- INFO 624: Information Retrieval Systems, 2010 -
- INFO 600: Web Systems and Architecture, 2019 -
- INFO 371: Data Mining with Machine Learning, 2015 -
- INFO 300: Information Retrieval Systems, 2020 -
- INFO 153: Applied Data Management, 2015 -
- INFO 152: Web Systems and Services II, 2015 -
- INFO 151: Web Systems and Services I, 2011 -
- CI 103: Computing and Informatics Design III, 2015 -
- CI 102: Computing and Informatics Design II, 2015 -
- CI 101: Computing and Informatics Design I, 2014 -

University of North Carolina at Chapel Hill

Teaching Assistant and Adjunct Instructor, School of Information and Library Science

- INLS 461: Information Tools, Fall 2009 (instructor)
- INLS 523: Database I, Spring 2009 (teaching assistant and co-instructor)
- INLS 890: Cyberinfrastructures (teaching assistant)

Indiana University Bloomington

Teaching Assistant, School of Library and Information Science

L579: Information Visualization, Spring 2005, 2006

L597: Structural Data Mining and Modeling, Fall 2004, 2005

Doctoral Student Advising

Advisor to Sonia Pascua, starting January 2022 (candidacy December 2021)

Yue Zhang dissertation committee, final defense March 2022.

Alex Kalinowski dissertation proposal committee, May 2022.

Chair, dissertation committee: Xuemei Gong (candidacy 2013, proposal 2014, final dissertation defense December 2015), Bo Song (advisor, final dissertation defense June 2020), Yizhou Zang (co-advisor, final dissertation defense June 2020)

Weimao Ke

Member, dissertation committee: Meen Chul Kim (2021), Yongjun Zhu (proposal 2016), Yuan Ling (proposal 2016), Zhong Huang (2014 final defense), Xiaoli Song (2013), Anton Slutsky (2013, final defense 2015), Mi Zhang (2013, final defense 2015), Katherine Chuang (2013, final defense May 2013), Xuning Tang (2012, final defense February 2013), Lifan Guo (2011 - 2013 final defense), Xin Chen (final defense December 2012), Zunyan Xiong (2012, final defense 2015), Jia Huang (2012, final defense 2014), Haozhen Zhao (2011, 2012, expected final defense September 2015)

Member, proposal committee member: Sam Grabus (2021), Qing Ping (2015), Yuan Ling (2014), Yizhou Zang (2014), Bo Song (2014), Yongjun Zhu (2014), Yue Shang (2013), Haodong Yang (2013), Ling Jiang (2013), Mi Zhang (2012)

Member, portfolio review committee: Meen Chul Kim (2014), Yongjun Zhu (2013), Ling Jiang (2012), Zunyan Xiong (2011), Jia Huang (2010, 2011)

Independent Research/Project Supervision

Kan Kim. Undergraduate independent study on *Data Science Job Title Analysis with Term Weighting Schemes*, June - August 2022.

Kashti Umare. Summer research project on *Mathematical Analyses and Proofs of DLITE's Metric Properties*, June - August 2022.

Aalekh Ray Chaudhury, Undergraduate STAR Scholar, 02 - 08/2021: DLITE for Text Classification

Yongjun Zhu, Doctoral Student, 2016 Summer, Fall-: High-level Structural Analysis on Graphs

Yuvraj Sharma, Undergraduate STAR Scholar, 2016 Summer: Probabilistic Information Retrieval.

Meen Chul Kim, Doctoral Student, Spring 2015: Mining Massive Datasets (toward a cloud computing frameworkd for large-scale graph analysis)

Yuan Dong, Masters student, Spring 2015: Digital Library Technologies and Text Mining

Yan Ji, Masters student, Fall 2013: K-means clustering on Hadoop

Sheik Hassan, Drexel STAR Scholar, Summer & Fall 2013: Affinity Propagation on Hadoop

Xiaoli Song, Doctoral student, Winter & Summer 2013: MapReduce Data-intensive Processing

Xuemei Gong, Doctoral student, Summer 2012 & Fall 2013: Scatter/Gather for IR

Yizhou Zang, Masters student, Summer 2012: Distributed clustering

Anh Nguyen, Undergraduate, Winter 2011: Honors option project

Invited Lectures and Presentations

Presentation at IEEE BigData, December 2022. Osaka, Japan.

Presentation at ICCSN conference, 2018. Chengdu, China.

Poster at ACM SIGIR, August 2017, Tokyo, Japan.

Presentation at ICMSS. 2017. Wuhan, China.

Presentation at Metadata Mondays, March 2016, Philadelphia, PA.

Presentation at ACM WSDM'15 SDATA workshop, February 2015, Shanghai, China.

Presentation at NSF I/UCRE CVDI meeting, November 2013, Lafayette, LA: AP Clustering on Hadoop. Guest lecture for Doctoral Research Methods class, Fall 2013, Philadelphia PA: IR Theory and Practice. Presentation at ACM/IEEE JCDL 2013, Indianapolis, IN: Information-theoretic Doc Representation. Invited talk at CVDI Seminar, The iSchool at Drexel, 2013: Clustering Paradox and Least Info Theory. Presentation at R&T Talks, The iSchool at Drexel, 2011: Large-scale distributed systems for IR. Invited talk at NCSU Computer Science, 2010, Raleigh, NC: Scalability of Findability. Posters at ALISE 2010, Boston, MA: Scatter/Gather & Scalability of Findability. Presentation at NBiS 2009, Indianapolis, IN: Decentralized Reviewer Finding. Presentation at LSDS-IR 2009, Boston, MA: Clustering Paradox and Decentralized Search. Presentation at ACM SIGIR 2009, Boston, MA: Scatter/Gather Clustering. Guest lecture for DocShop, Spring 2009, Chapel Hill, NC: LATEX and Scientific Writing. Poster at iConference 2009, Chapel Hill, NC: The Rich Get Richer. Poster at ALISE 2009, Denver, CO: Agent Referral for Expertise Retrieval. Presentation & Posters at ASIS&T 2008, Columbus, OH: Scatter/Gather & Multi-Agent. Presentation at SILS Doctoral Symposium 2008, Chapel Hill, NC: Scatter/Gather Study. Invited talk at ASIS&T Carolina Chapter 2008, Chapel Hill, NC: Info Vis for IR Research. Guest lecture for Info Organization class, Spring 2008, Chapel Hill, NC: Clustering. Presentation at ACM/IEEE JCDL 2007, Vancouver, Canada: Collaborative Classifier Agent. Presentation at IUDL 2007, Bloomington, IN: Multi-Agent Collaboration for Info Classification. Poster at NSDL 2006, Washington, DC: Project Enable: Web Search and Scatter/Gather Invited talk at IUDL 2005, Bloomington, IN: Project ENABLE: System Workflow. Poster at NSDL 2004, Chicago, IL: Project ENABLE: Bioinformatics Learning Environment. Presentation & Poster at InfoVis 2004, Austin, TX: Major IV Authors, Papers & Topics in ACM.

Services

Review Panels

NSF Review Panel, Fall 2020

Drexel NIH Science Education Partnership Award (SEPA) (R25) Review

Weimao Ke

Journal Reviewer and Editorial Board

Editorial board for the ASLIB Journal of Information Management: 2021 -Information Technology and Management, a Springer Journal Journal of the Association for Information Science and Technology PeerJ Computer Science, an Open Access Journal ACM Transactions on Asian Language Information Processing (TALIP) International Journal of Pattern Recognition and Artificial Intelligence ACM Transactions on Internet Technology (TOIT) Public Library of Science PLOS, ONE ACM Transactions on the Web (TWEB) ACM Transactions on Intelligent Systems and Technology (TIST) Information Processing & Management (IP&M), an International Journal ACM Transactions on Information Systems (TOIS) Journal of Autonomous Agents and Multi-Agent Systems (JAAMAS) SpringerPlus, a SpringerOpen Journal Scientometrics, an International Journal International Journal of Information and Communication Technology (IJICT) *Conference Organization, Program Committee, and Services* Program committee, ACM/IEEE JCDL 2020 Program committee, the iConference 2016 Program committee, ACM SIGIR Conference, 2011, 2013, 2014 Registration chair, IEEE International Conference on BigData, 2013 Program committee & review coordinator, ACM IHI Health Informatics Conference, 2012 Program committee, American Society for Information Science and Technology, 2012 Program committee, NAACL HLT Student Research Workshop, 2009 Reviewer, IEEE Information Visualization Conference (IEEE InfoVis), 2009 Reviewer and volunteer, The Fourth iSchools Conference, 2009

Student volunteer, IEEE Visualization Conference, 2004

College and University

Chair, Information Science Graduate Curriculum Committee, 2021-

Member, College of Computing and Informatics Curriculum Committee, 2021-

Chair, Teaching Faculty Search, Information Science, Drexel University, 2019 - 2021

Chair, BS Information Systems working group, Information Science, Drexel University, 2020 - 2021

MS Information Systems working group, Information Science, Drexel University, 2020 - 2021

CCI representative in the Senate Nomination Committee, 2014 - 2018, Drexel University

Informatics Undergraduate Curriculum Committee, College of Computing and Informatics, Drexel University, 2013-2015

ABET Committee (self-evaluation and documentation of IS and IT programs for ABET accreditation), College of Computing and Informatics, Drexel University, 2013-2014

Curruculum Committee (undergraduate curriculum subcommittee), College of Information Science and Technology, Drexel University, 2012-2013

Ad Hoc Committee on Undergraduate Education, The iSchool at Drexel, 2011-2012

Committee on Research and Teaching Talks, The iSchool at Drexel, 2010-2011

Computer Skills

With over 25 years' experience in technology innovation, research, development, and engineering.

Statistical Packages in R, Python, and SAS.

Computer Languages: SQL, JAVA, Python, Flutter/Dart, Play framework, Node.js, React, Svelte, NextJS, Flask, Perl, PHP, ASP, Awk, VB/A, HTML+CSS+Javascript, jQuery, jQuery Mobile, etc.

Databases: PostgreSQL, MySQL, SQL Server, MS Access, Oracle, Cassandra, MongoDB, NoSQL, SQLite, etc.

Systems for Research: ElasticSearch, Lucene, Weka, JADE, Lemur, Spark, Hadoop (Cloudera CDH), GridGain, Cougaar, Diet, MPI, Cordova, etc.

OS, Cloud and others: Linux/BSD/Unix, GCP, Mac OS, Windows, AWS, Cross-platform Mobile, etc.

Languages

Chinese - native speaker

English - speak fluently and read/write with high proficiency

Hokkien - native speaker (a southern Chinese dialect, a.k.a., Taiwanese)

Professional Affiliations and Memberships

Association for Computing Machinery (ACM)

ACM Special Interest Group on Information Retrieval (SIGIR)

American Society for Information Science and Technology (ASIS&T)

Information Retrieval Facility (IRF), 2010 - 2011

Association for Library and Information Science Education (ALISE), 2009-2010

Biomedical Informatics Core, NC Translational and Clinical Sciences (TraCS) Institute, 2009-2010

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