

**Yiqun Liu**

Associate Professor & Vice Chair

Department of Computer Science and
Technology**Email** yiqunliu@tsinghua.edu.cn**URL** <http://www.thuir.org/group/~yqliu>**Phone** +86-10-62796672**Fax** +86-10-62796672**Mobile** +86-13810020265**Personal Profile**

Dr. Liu is now working as associate professor (with tenure) at the Department of Computer Science and Technology in Tsinghua University, Beijing, China. His major research interests are in Web Search, User Behavior Analysis, and Natural Language Processing. He is also a Principle Investigator (PI) of a joint Center (named NExT) between National University of Singapore and Tsinghua University to develop technologies for live media search.

He serves on the editorial boards of the Information Retrieval Journal and Foundations and Trends in Information Retrieval. He also serves as Program Co-chair of SIGIR2018, Short Paper Co-chair of SIGIR2017, Program Co-chair of NTCIR-13, General Co-chair of AIRS2016 as well as program committee members of a number of important international academic conferences including SIGIR, WWW, KDD, AAAI, ACL and IJCAI. He published over 50 papers in top-tier academic conferences/journals and got over 1,900 citations (H-index=21) according to Google scholar (<https://scholar.google.com/citations?user=NJOnxh4AAAAJ>). He received the best paper honorable mention award of SIGIR2015 and AIRS2013/2016. He has also been the coordinator for the NTCIR INTENT and IMine tasks since 2011.

Education

Bachelor of Engineering, Tsinghua University, Beijing, China, 2003;

Ph.D. in Computer Science & Technology, Tsinghua University, Beijing, China, 2007

Research Focuses and achievements

Dr. Liu is generally interested in the research areas of Web search technology and Web user behavior analysis, and has particular interests in improving search performance with the help of user behavior information.

Current commercial search engines face great challenges due to the rapid growth of WWW data and user requests. To improve their performance, he leverages the behavior information of search users, so called "wisdom of the crowd", which has been found very useful. With the support of National Natural Science Foundation of China and a

number of industrial partners including Google, Baidu, Yahoo, Sogou, Alibaba and Samsung, tangible progresses were made in this direction.

The aspects of our recent projects cover User behavior modeling, Web data quality estimation and search performance evaluation. We have published several high-quality papers in TWEB, JASIST, JIR, SIGIR, WWW, CIKM, WSDM, IJCAI, AAAI and some other important journals and conferences. In total, 22 Chinese patents were filed and 10 of them were approved. Algorithms and systems developed from these projects have been adopted by Sogou.com, one of the most popular search engines in China.

Key Grant Information

NSFC Youth Grant: Detection of Web spam pages based on user behavior information (2010-2012, RMB 0.2M)

NSFC Outstanding Young Scholar: Information Retrieval and Evaluation (2017-2019, RMB 1.5M)

Tsinghua-Sogou Joint Research Lab on Web Search Technologies (2007-2016, RMB 60M)

Research Grants from Yahoo Faculty Research and Engagement Program (FREP), Google Code University, Baidu, Alibaba, Samsung and other industrial partners. (2007-2016, around RMB 7M)

Academic services

Program Co-Chair of the 41st International ACM SIGIR conference on Information Retrieval (SIGIR2018).

Editorial Board Member of Information Retrieval Journal (IRJ, springer).

Editorial Board Member of Foundations and Trends in Information Retrieval (FnTIR).

Program Co-Chair of NTCIR-13 (NII Testbeds and Community for Information Access Research).

General Co-Chair of the Twelfth Asia Information Retrieval Societies Conference (AIRS 2016).

Short Paper Co-Chair of the 40th International ACM SIGIR conference on Information Retrieval (SIGIR2017).

Sponsorship Chair of the 2015 Conference of the Association for Computational Linguistics (ACL2015).

Task coordinator of NTCIR core tasks: INTENT, INTENT-2, IMine, IMine-2.

Program committee members of various top-tier academic conferences including SIGIR, WWW, ACL, WSDM, IJCAI etc.

Univeristy/Department Services

Head of the Under-graduate Student Affairs (2007 - 2011)

Head of the Department's Student Affairs Committee (2011-2014)

Vice Chair of the Department (2011-now)

Major Awards

Qian Wei-Chang Chinese Information Processing Award: Youth Innovation Prize, 2010

Best Paper Nomination Award / Best Poster Paper Award, Asian Information Retrieval Societies conference, AIRS 2013

Best Paper Nomination Award, Asian Information Retrieval Societies conference, AIRS 2016

Best Paper Award Honorable Mention, SIGIR 2015

The Science and Technology Award of Beijing, first grade, 2015.

Selected Publications (2012-2016)

(A complete list of publications can be found at my homepage:

<http://www.thuir.cn/group/~yqliu/>)

Yiqun Liu, Yi Chang and Jian-yun Nie. Constructing click models for search users. Information Retrieval Journal (**IRJ**). DOI: 10.1007/s10791-017-9294-x.

Yuli Liu, **Yiqun Liu**, Ke Zhou, Min Zhang and Shaoping Ma. Detecting Collusive Spamming Activities in Community Question Answering. The 26th International World Wide Web Conference (**WWW2017**).

Cheng Luo, **Yiqun Liu**, Tetsuya Sakai, Ke Zhou, Fan Zhang, Xue Li and Shaoping Ma. Does Document Relevance Affect the Searcher's Perception of Time? The Tenth ACM International Conference on Web Search and Data Mining (**WSDM2017**)

Xin Li, **Yiqun Liu**, Rongjie Cai and Shaoping Ma. Investigation of User Search Behavior While Facing Heterogeneous Search Services. The Tenth ACM International Conference on Web Search and Data Mining (**WSDM2017**)

Yiqun Liu, Xiaohui Xie, Chao Wang, Jian-Yun Nie, Min Zhang and Shaoping Ma. Time-Aware Click Model. ACM Transactions on Information Systems (**TOIS**). Vol. 35, No. 3, Article 16.

Yiqun Liu, Zeyang Liu, Ke Zhou, Meng Wang, Chao Wang, Jiaxin Mao, Min Zhang, Shaoping Ma. Predicting Search User Examination with Visual Saliency Information. The 39th ACM SIGIR International Conference on Research on Development in Information Retrieval (**SIGIR2016**)

Jiaxin Mao, **Yiqun Liu**, Ke Zhou, Jian-Yun Nie, Min Zhang, Shaoping Ma. When does Relevance Mean Usefulness and User Satisfaction in Web Search? The 39th ACM SIGIR International Conference on Research on Development in Information Retrieval (**SIGIR2016**)

Yuli Liu, **Yiqun Liu**, Min Zhang and Shaoping Ma. Pay Me and I'll Follow You: Detection of Crowdturfing Following Activities in Microblog Environment. The 25th International Joint Conference on Artificial Intelligence (**IJCAI2016**)

Yiqun Liu, Ye Chen, Jinhui Tang, Jiashen Sun, Min Zhang, Shaoping Ma, Xuan Zhu, Different users, Different Opinions: Predicting Search Satisfaction with Mouse Movement Information. The 38th ACM SIGIR International Conference on Research on Development in Information Retrieval (**SIGIR2015**)

Chao Wang, **Yiqun Liu**, Meng Wang, Ke Zhou, Jian-Yun Nie, Shaoping Ma, Incorporating Non-sequential Behavior into Click Models. The 38th ACM SIGIR International Conference on Research on Development in Information Retrieval (**SIGIR2015 Best Paper Honorable Mention**).

Zeyang Liu, **Yiqun Liu**, Ke Zhou, Min Zhang, Shaoping Ma, Influence of Vertical Result in Web Search Examination. The 38th ACM SIGIR International Conference on Research on Development in Information Retrieval (**SIGIR2015**).

Huiqi Hu, **Yiqun Liu**, Guoliang Li, Jianhua Feng, A Location-Aware Publish/Subscribe Framework for Parameterized Spatio-Textual Subscriptions, The 31st IEEE International Conference on Data Engineering (**ICDE2015**)

Ye Chen, **Yiqun Liu**, Ke Zhou, Min Zhang, Shaoping Ma. Does Vertical Bring more Satisfaction? Predicting Search Satisfaction in a Heterogeneous Environment. The 24th ACM International Conference on Information and Knowledge Management (**CIKM2015**)

Xin Li, **Yiqun Liu**, Min Zhang, Shaoping Ma, Xuan Zhu, Jiashen Sun, Detecting Promotion Campaigns in Community Question Answering, International Joint Conference on Artificial Intelligence (**IJCAI2015**)

Yiqun Liu, Chao Wang, Ke Zhou, Jianyun Nie, Min Zhang, Shaoping Ma, From Skimming to Reading: A Two-stage Examination Model for Web Search, The 23rd ACM International Conference on Information and Knowledge Management (**CIKM2014**)

Xin Li, **Yiqun Liu**, Min Zhang, Shaoping Ma, Fraudulent Support Telephone Number Identification Based on Co-occurrence Information on the Web. The Twenty-Eighth AAAI Conference on Artificial Intelligence (**AAAI2014**)

Xin Li, Min Zhang, **Yiqun Liu**, Shaoping Ma, Yijiang Jin and Liyun Ru. Search Engine Click Spam Detection Based on Bipartite Graph Propagation. Proceedings of the 7th ACM International Conference on Web Search and Data Mining (**WSDM2014**).

Chao Wang, **Yiqun Liu**, Min Zhang, Shaoping Ma, MeihongZheng, Jing Qian, Kuo Zhang. Incorporating Vertical Results into Search Click Models. The 36th ACM SIGIR International Conference on Research on Development in Information Retrieval (**SIGIR2013**)

Qianli Xing, **Yiqun Liu**, Min Zhang, Shaoping Ma, Jianyun Nie, Kuo Zhang. Incorporating User Preferences into Click Models. The 22nd ACM International Conference on Information and Knowledge Management (**CIKM2013**)

Jian Liu, **Yiqun Liu**, Min Zhang, Shaoping Ma, Kuo Zhang. A Study of Long-term Search Engine Users' Behavior. The 22nd ACM International Conference on Information and Knowledge Management (**CIKM2013**).

Qianli Xing, **Yiqun Liu**, Min Zhang, Shaoping Ma, and Kuo Zhang. Characterizing Expertise of Search Engine Users. The Ninth Asian Information Retrieval Societies Conference (**AIRS2013 Best paper nomination award**).

Yiqun Liu, Fei Chen, Weize Kong, Huijia Yu, Min Zhang, Shaoping Ma, Liyun Ru. Identifying Web Spam with the Wisdom of the Crowds. **ACM Transaction on the Web**. Volume 6, Issue 1, March 2012.

Chao Wei, **Yiqun Liu**, Min Zhang, Shaoping Ma, LiyunRu, Kuo Zhang: Fighting against web spam: a novel propagation method based on click-through data. The 35th ACM SIGIR International Conference on Research on Development in Information Retrieval (**SIGIR2012**)

Danqing Xu, **Yiqun Liu**, Min Zhang and Shaoping Ma. Incorporating Revisiting Behaviors into Click Models. Proceedings of the 5th ACM International Conference on Web Search and Data Mining. (**WSDM2012**).