

**Yiqun Liu**

Professor & Department co-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**

Yiqun Liu is now working as professor and co-chair at the Department of Computer Science and Technology in Tsinghua University, Beijing, China. His major research interests include Web Search, User Behavior Analysis, and Web Data Mining. He is senior members of ACM and IEEE, distinguished member of CCF, a visiting professor of National Institute of Informatics (NII) in Japan and a visiting research professor of National University of Singapore (NUS).

He serves as Chair of the local chapter of SIGIR in China named Beijing ACM SIGIR Chapter. He serves as the co-Editor-in-Chief of Foundations and Trends in Information Retrieval (FnTIR) and also on the editorial boards of Journal of the Association for Information Science and Technology (JASIST) and Information Retrieval Journal (IRJ). He serves as General vice Chair of SIGIR2020, Program Co-chair of SIGIR2018, area chair of ACL2018 and WWW2020, Program Co-chair of NTCIR-13/14/15, Program Co-chair of ICTIR2020, General Co-chair of AIRS2016 as well as (senior) program committee members of several important international academic conferences including SIGIR, WWW, KDD, IJCAI, AAAI, CIKM and WSDM. He published over 100 papers in top-tier academic conferences/journals and got over 4,900 citations according to Google scholar (H-index=33). He received the Best Overall Paper Award of CIKM2018, Best Paper Honorable Mention Award of SIGIR2015, Best Short Paper Honorable Mention Award of SIGIR2018 and ICTIR2019, Best Student Paper Award of SIGIR2017 and Best Paper Award of AIRS2018. He is also the recipient of Excellent Young Scientists Fund from the National Natural Science Foundation of China (NSFC) and the Leading talent in scientific and technological innovation award from the Ministry of Science and Technology of China (MOST).

Education

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

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

Research Focuses and achievements

Prof. Liu is generally interested in the research areas of Web search technology and Web user behavior analysis. He 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, Tencent, 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 TOIS, TKDE, TWEB, JASIST, JIR, SIGIR, WWW, CIKM, WSDM and some other important journals and conferences. In total, 22 Chinese patents were filed and 13 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 Excellent Young Scientists Fund: Information Retrieval and Evaluation (2017-2019, RMB 1.5M)

NSFC Key Program: Heterogeneous Media Content Search for Complex Queries (2018-2022, RMB 3.1M)

The National Key Research and Development Program of China: Intelligent Methods in Legal Information Access to Public. (2019-2021, RMB 11.0M)

Tsinghua-Sogou Joint Research Lab on Web Search Technologies (2007-2020, 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

Chair of Beijing ACM SIGIR Chapter

General Vice Chair of the 43rd International ACM SIGIR conference on Information Retrieval (SIGIR2020).

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 Journal of the Association for Information Science and Technology (JASIST)

Co-Editorial in Chief of Foundations and Trends in Information Retrieval (FnTIR).

Program Co-Chair of the 10th International Conference on the Theory of Information Retrieval (ICTIR2020).

Search Track chair of the Web Conference 2020 (TheWebConf2020)

Area co-chair of the 56th Annual Meeting of the Association for Computational Linguistics (ACL2018)

Program Co-Chair of NTCIR-13/14 (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.

Senior Program committee members of various top-tier academic conferences including SIGIR, WWW, CIKM 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 (2011-2017)

Co-Chair of the Department (2018-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

Best Student Paper Award, SIGIR 2017

Best Short Paper Award Honorable Mention, SIGIR 2018

Best Overall Paper Award, CIKM 2018

Best Paper Award Honorable Mention, ICTIR 2018

Best Paper Award, AIRS 2018

Best Short Paper Award Honorable Mention, ICTIR 2019

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

Selected Publications (2016-2020)

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

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

Yiqun Liu, Jiaxin Mao. "Revisiting information retrieval tasks with user behavior models" by Yiqun Liu and Jiaxin Mao with Martin Vesely as coordinator. ACM SIGWEB Newsletter. February 2020, Article No.: 3, pp 1–8.

Fan Zhang, Jiaxin Mao, **Yiqun Liu**, Xiaohui Xie, Weizhi Ma, Min Zhang and Shaoping Ma. Models Versus Satisfaction: Towards a Better Understanding of Evaluation Metrics. The 43rd International ACM SIGIR Conference on Research and Development in Information Retrieval. (**SIGIR2020**)

Fan Zhang, Jiaxin Mao, **Yiqun Liu**, Weizhi Ma, Min Zhang and Shaoping Ma. Cascade or Recency: Constructing Better Evaluation Metrics for Session Search. The 43rd International ACM SIGIR Conference on Research and Development in Information Retrieval. (**SIGIR2020**)

Xiaohui Xie, Jiaxin Mao, **Yiqun Liu**, Maarten de Rijke, Haitian Chen, Min Zhang and Shaoping Ma. Preference-based Evaluation Metrics for Web Image Search. The 43rd International ACM SIGIR Conference on Research and Development in Information Retrieval. (**SIGIR2020**).

Zhijing Wu, Jiaxin Mao, **Yiqun Liu**, Jingtao Zhan, Yukun Zheng, Min Zhang, and Shaoping Ma. Leveraging Passage-level Cumulative Gain for Document Ranking. to appear in the Web Conference 2020 (**WWW2020**).

Jia Chen, Jiaxin Mao, **Yiqun Liu**, Min Zhang, and Shaoping Ma. A Context-Aware Click Model for Web Search. The 13th International Conference on Web Search and Data Mining (**WSDM2020**).

Yukun Zheng, Jiaxin Mao, **Yiqun Liu**, Mark Sanderson, Min Zhang, and Shaoping Ma. Investigating Examination Behavior in Mobile Search. The 13th International Conference on Web Search and Data Mining (**WSDM2020**).

Jiaxin Mao, Zhumin Chu, Yiqun Liu, Min Zhang, and Shaoping Ma. Investigating the Reliability of Click Models. The 5th ACM SIGIR International Conference on the Theory of Information Retrieval (**ICTIR2019 Best Short Paper Honorable Mention**).

Yukun Zheng, Jiabin Mao, **Yiqun Liu**, Cheng Luo, Min Zhang, and Shaoping Ma. 2019. Constructing Click Model for Mobile Search with Viewport Time. ACM Transactions on Information Systems (**TOIS**). Volume 37 Issue 4.

Yiqun Liu, Junqi Zhang, Jiabin Mao, Min Zhang, Shaoping Ma, Qi Tian, Yanxiong Lu, Leyu Lin. Search Result Reranking with Visual and Structure Information Sources. ACM Transactions on Information Systems (**TOIS**). Volume 37 Issue 3.

Yunqiu Shao, **Yiqun Liu**, Fan Zhang, Min Zhang and Shaoping Ma. On Annotation Methodologies for Image Search Evaluation. ACM Transactions on Information Systems (**TOIS**). Volume 37 Issue 3.

Xiaohui Xie, Jiabin Mao, **Yiqun Liu**, Maarten de Rijke, Yunqiu Shao, Zixin Ye, Min Zhang and Shaoping Ma. Grid-based Evaluation Metrics for Web Image Search Search. The Web Conference 2019 (**WWW2019**).

Yingying Wu, **Yiqun Liu**, Yen-Hsi Richard Tsai, Shing-Tung Yau. Investigating the Role of Eye Movements and Physiological Signals in Search Satisfaction Prediction Using Geometric Analysis. Journal of the Association for Information Science and Technology (JASIST) 2019.

Jiabin Mao, **Yiqun Liu**, Noriko Kando, Min Zhang, Shaoping Ma. How does Domain Expertise Affect User's Search Interaction and Outcome in Exploratory Search? Accepted by ACM Transactions on Information Systems (**TOIS**).

Junqi Zhang, **Yiqun Liu**, Shaoping Ma, Qi Tian. Relevance Estimation with Multiple Information Sources on Search Engine Result Pages. The 27th ACM International Conference on Information and Knowledge Management (**CIKM2018**)

Xiangsheng Li, **Yiqun Liu**, Jiabin Mao, Zexue He, Min Zhang, Shaoping Ma. Understanding Reading Attention Distribution during Relevance Judgement. The 27th ACM International Conference on Information and Knowledge Management (**CIKM2018**).

Mengyang Liu, **Yiqun Liu**, Jiabin Mao, Cheng Luo, Min Zhang and Shaoping Ma. "Satisfaction with Failure" or "Unsatisfied Success": Investigating the Relationship between Search Success and User Satisfaction. The Web Conference 2018 (**WWW2018**).

Ning Su, **Yiqun Liu**, Zhao Li, Yuli Liu, Min Zhang and Shaoping Ma. Detecting Crowdturfing "Add to Favorites" Activities in Online Shopping. The Web Conference 2018 (**WWW2018**).

Fuli Feng, Xiangnan He, **Yiqun Liu**, Liqiang Nie and Tat-Seng Chua. Learning on Partial-Order Hypergraphs. The Web Conference 2018 (**WWW2018**).

Chong Chen, Min Zhang, **Yiqun Liu** and Shaoping Ma. Neural Attentional Rating Regression with Review-level Explanations. The Web Conference 2018 (**WWW2018**).

Ye Chen, **Yiqun Liu**, Min Zhang and Shaoping Ma. User Satisfaction Prediction with Mouse Movement Information in Heterogeneous Search Environment. IEEE Transactions on Knowledge and Data Engineering. (**TKDE**)

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**).

Fan Zhang, **Yiqun Liu**, Xin Li, Min Zhang, Yinghui Xu and Shaoping Ma. Evaluating Web Search with a Bejeweled Player Model. The 39th ACM SIGIR International Conference on Research and Development in Information Retrieval (**SIGIR2017 Best Student Paper Award**).

Cheng Luo, **Yiqun Liu**, Tetsuya Sakai, Fan Zhang, Min Zhang and Shaoping Ma. Evaluating Mobile Search with Height-Biased Gain. The 39th ACM SIGIR International Conference on Research and Development in Information Retrieval (**SIGIR2017**).

Ye Chen, Ke Zhou, **Yiqun Liu**, Min Zhang and Shaoping Ma. Meta-evaluation of Online and Offline Web Search Evaluation Metrics. The 39th ACM SIGIR International Conference on Research and Development in Information Retrieval (**SIGIR2017**).

Xiaohui Xie, **Yiqun Liu**, Xiaochuan Wang, Meng Wang, Zhijing Wu, Yingying Wu, Min Zhang and Shaoping Ma. Investigating Examination Behavior of Image Search Users. The 39th ACM SIGIR International Conference on Research and Development in Information Retrieval (**SIGIR2017**).

Jiaxin Mao, **Yiqun Liu**, Huanbo Luan, Min Zhang and Shaoping Ma. Understanding and Predicting Usefulness Judgment in Web Search. (Short paper). The 39th ACM SIGIR International Conference on Research and Development in Information Retrieval (**SIGIR2017**).

Cheng Luo, Yukun Zheng, **Yiqun Liu**, Xiaochuan Wang, Jingfang Xu, Min Zhang and Shaoping Ma. SogouT-16: A New Web Corpus to Embrace IR Research. (Short paper). The 39th ACM SIGIR International Conference on Research and Development in Information Retrieval (**SIGIR2017**).

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**)