

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

Introduction

Dr. Liu is now working as associate professor 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 in the editorial board of the Information Retrieval Journal (Springer). He also serves as short paper chair of SIGIR2017, program chair of NTCIR-13, general chair of AIRS2016 as well as program committee members of a number of important international academic conferences including SIGIR, WWW, AAAI, ACL and IJCAI. He published over 30 papers in top-tier academic conferences/journals and got over 1,500 citations according to Google scholar. He received the best paper honorable mention award of SIGIR2015 and AIRS2013. 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 Projects

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

Current commercial search engines face great challenges in the rapid growth of WWW data and user requests. In order to improve their performance, he found that the behavior information of search users, so called "wisdom of the crowd", can be utilized. 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. Totally 22 Chinese patents were filed and 10 of them were authorized. Algorithms and systems developed from these projects have been adopted by Sogou.com, one of the most popular search engines in China.

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 Award Honorable Mention, SIGIR 2015

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

Recent Publications

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**)

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**).