Qingyun Wu

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RESEARCH INTEREST

Machine Learning, Data Mining and Information Retrieval

EDUCATION

University of Virginia — Charlottesville, U.S.A
Ph.D student, Department of Computer Science — 08/2014 - present
GPA: 3.77, Advisor: Hongning Wang

Xidian University — Xi'an, China
B.E, Department of Telecommunication Engineering — 08/2010 - 07/2014
GPA: 3.65, Rank: 10/335

RESEARCH EXPERIENCE

Non-stationary Contextual Bandits — 05/2017 - Present
Ph.D Research Project at the University of Virginia

- Lead the project of developing several bandit learning algorithms in a non-stationary environment which can automatically capture the non-stationary trends of users' preferences in online recommendation.

Optimizing Long-term User Engagement in Recommender Systems 06/2016 - 05/2017
Intern Research Project at Yahoo! Research

- Mentors: Dr. Liangjie Hong and Dr. Yue Shi
- During the internship, lead the research project of improving long-term user engagement in Yahoo's News feed module.

Contextual Bandit in a Collaborative Environment — 03/2015 - 03/2016
Ph.D Research project at the University of Virginia

- Lead the project of developing several novel contextual bandit algorithms in a collaborative environment which leverages user dependency to share interests of a user to his/her friends, and can be applied to many modern information service systems, such as content recommendation, and ads placement.
- Provide rigorous theoretical analysis for the developed algorithms

Hidden Features Learning for Contextual Bandits — 10/2015 - 02/2016
Ph.D Research Project at the University of Virginia

- Participate the project of hidden feature learning in contextual bandits.
- Proved a sublinear upper regret bound with high probability for the developed contextual bandit algorithm.

AWARDS

- **Virginia Engineering Foundation Graduate Fellowship**, 2018
- **Graduate Student Award for Outstanding Research, Honorable Mention** Department of Computer Science, University of Virginia, 2017
- **Best Research Short** at 2017 ACM Capital Region Celebration of Women in Computing Conference — Washington, D.C. 2017
- Student Travel Award from US National Science Foundation and SIGWEB 2017
- The ACM SIGIR Student Travel Grant for CIKM 17' 2017
- The 39th International ACM SIGIR Conference Student Travel Grant 2016

- The 20th International ACM SIGKDD Conference Student Travel Grant 2016
- Excellent Undergraduate Thesis Award at Xidian Univ.(< 1%) 2014
- National Encouragement Scholarship of China (< 3%) 2013
- Honorable Mention, Mathematics Contest in Modeling/Interdisciplinary Context in Modeling 2013
- Provincial First Price, China Undergraduate Mathematics Contest in Modeling 2012
- Yulong CoolPad Scholarship for Excellent Students (< 1%) 2012
- Outstanding Student Scholarship of Xidian Univ.(< 5%) 2011, 2012, 2013

PUBLICATIONS

[1] **Qingyun Wu**, Huazheng Wang, Yanen Li, Naveen Iyer and Hongning Wang. Dynamic Ensemble of Contextual Bandits to Conquer a Non-stationary Environment. ICML 2018. (Under Review).

[2] **Qingyun Wu**, and Naveen Iyer and Hongning Wang. Learning Contextual Bandits in a Non-stationary Environment. SIGIR 2018.

[3] **Qingyun Wu**, Hongning Wang, Liangjie Hong and Yue Shi. Returning is believing: Optimizing long-term user engagement in recommender systems. the 26th ACM International Conference on Information and Knowledge Management (CIKM 2017) (acceptance rate: 21%).

[4] Huazheng Wang, **Qingyun Wu** and Hongning Wang, *Online Interactive Recommendation via Factorization Bandits*, The Thirty-First AAAI Conference on Artificial Intelligence (AAAI 2017) (acceptance rate: 24.6%)

[5] Huazheng Wang, **Qingyun Wu** and Hongning Wang, *Learning Hidden Features for Contextual Bandits*, the 25th ACM International Conference on Information and Knowledge Management (CIKM 2016) (acceptance rate: 17.6%)

[6] **Qingyun Wu**, Huazheng Wang, Quanquan Gu, and Hongning Wang. Contextual bandits in a collaborative environment. *In Proceedings of the 39th International ACM SIGIR conference on Research and Development in Information Retrieval,* pages 529-538. ACM, 2016 (acceptance rate: 18%)

ACADEMIC ACTIVITIES

- **Intern Research Scientist in Yahoo Research** 05/2016 - 08/2016
  - Mentor and Manager: Dr. Liangjie Hong
- **Oral Presentation** at Mid-Atlantic Student Colloquium on Speech, Language and Learning 05/2017
- **Poster presentation** at the CRA-W Grad Cohort Workshop 04/2016 & 04/2017
- Attended 2015 Grace Hopper Celebration of Women in Computing 10/2015
- **Poster presentation** at Center for Dynamic Data Analytics workshop 04/2016
- **Poster presentation** at U.Va Datapalooza: 'Collaborative Contextual Bandits' 09/2015
- **Teaching Assistantship** 08/2014 - 05/2016, University of Virginia
  - CS 2150 Program and Data Representation
  - CS 6161 Algorithm; CS 4501 Information Retrieval; CS 6501 Text Mining

REFERENCES

Hongning Wang

- Assistant Professor, Department of Computer Science at University of Virginia
- **Email:** hw5x@virginia.edu
- **Homepage:** http://www.cs.virginia.edu/~hw5x/

Quanquan Gu

- Assistant Professor, Department of System & Information Engineering at University of Virginia
- **Email:** qg5w@virginia.edu
- **Homepage:** http://people.virginia.edu/~qg5w/

Liangjie Hong

- Head of Data Science at Etsy Inc.
- **Email:** lhong@etsy.com
- **Homepage:** http://www.hongliangjie.com/

Xinbo Gao

- Professor, School of Electronic Engineering at Xidian University
- **Email:** xbgao@mail.xidian.edu.cn
- **Homepage:** http://see.xidian.edu.cn/faculty/xbgao/