Qi (Rose) Yu

CONTACT INFORMATION

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RESEARCH INTERESTS

Spatio-temporal data analysis, Bayesian statistics, probabilistic graphical model, large scale machine learning algorithms with applications on social network and time series data analysis.

EDUCATION

University of Southern California, Los Angeles, California, USA
Department of Computer Science
Ph.D. Candidate, Computer Science, Fall 2012 (4th year completing May 2017)

- Advisors: Yan Liu, Cyrus Shahabi

Zhejiang University, Hangzhou, Zhejiang, PRC
Chu Kochen Honors College
B.S in Computer Science and Technology, June 2008. GPA 3.88/4.0

- Advisor: Zhihua Zhang

University of California, Davis, Davis, California, USA

Cultural Exchange Student, January 2010

CONFERENCE PUBLICATIONS

Rose Yu, Andrew Gelfand, Suju Rajan, Cyrus Shahabi, Yan Liu. "Geographic Segmentation via Latent Poisson Factor Model." To appear in ACM International Conference on Web Search and Data Mining (WSDM 2016)

Rose Yu, Dehua Cheng, Yan Liu. "Accelerated Online Low Rank Tensor Learning for Multivariate Spatiotemporal Streams." In Proceedings of the 32th International Conference on Machine Learning (ICML 2015)

Rose Yu*, Mohammad Taha Bahadori*, Yan Liu. "Fast Multivariate Spatio-temporal Analysis via Low Rank Tensor Learning." In Proceeding of Advances in Neural Information Processing Systems (NIPS 2014 Spotlight), **Equal Contributions*

Rose Yu, Xinran He, Yan Liu. "GLAD: Group Anomaly Detection in Social Media Analysis." In Proceeding of ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD 2014)

Cuixia Gao, Naiyan Wang, **Qi Yu**, Zhihua Zhang. "A Feasible Nonconvex Relaxation Approach to Feature Selection." In Proceeding of 24th AAAI conference on Artificial Intelligence (AAAI 2011)

Qi Yu, Zhihao Ding, Rong Rong, Wang Donghui, Zhengyue Zhang. "Dark Pixel Detection: A Novel Single Image Dehaze Approach". In Proceeding of 27th Image and Vision Computing New Zealand (IVCNZ 2011);

JOURNAL PUBLICATIONS

Rose Yu, Xinran He, Yan Liu. "GLAD: Group Anomaly Detection in Social Media Analysis - Extended Abstract." In ACM Transactions on Knowledge Discovery in Data (TKDD 2015)

WORKSHOPS PUBLICATIONS

Rose Yu, Dehua Cheng, Yan Liu. "Accelerated Online Low-Rank Tensor Learning for Multi-model Ensemble." Poster accepted to International Workshop on Climate Informatics workshop (CI 2015)

Mohammad Taha Bahadori, **Rose Yu**, Yan Liu. "Fast Cokriging via Low Rank Tensor Learning." Poster accepted to International Workshop on Climate Informatics workshop (CI 2014)

Rose Yu, Xinran He, Yan Liu. "Dynamic Social Network Group Anomaly Detection Using Hierarchical Bayesian Model." Poster accepted to Neural Information Processing Systems workshop (NIPS 2013)

Awards and Honors

WSDM SIGIR Travel Grant, San Fransisco, CA, 2016

Selected participant in Rising Stars in EECS: An Academic Career Workshop for Women, MIT, 2015

Annenberg Graduate Fellowship, Univesity of Southern Califonia, 2012-present

Graduate School Ph.D. Fellowships Travel Award, Univesity of Southern Califonia, 2015

USC Annenberg Graduate Fellowship Research Creative Symposium Award, Univesity of Southern Califonia, 2015

WiSE Travel Grant for Graduate Students and Post-doctoral Fellows, Montreal, CA,2014

NIPS 2014 Conference Travel Award, Montreal, CA,2014

2014 Broadening Participation in Data Mining Travel Scholarship,New York, US, 2014

Selected participant in the 1st Heidelberg Laureate Forum- Abel, Fields, Turing laureates meet next generation, University of Heidelberg, 2013

GHC scholarship, The Grace Hopper Celebration of Women in Computing, 2012

Microsoft 2011 Young Fellowship, Microsoft Research Asia, 2011

AAAI 2011 Conference Student Scholarship, AAAI, 2011

International Forum (iF) Design Hannover Global Concept Award, iF, 2010

First prize, Undergraduate Research and Innovation, Zhejiang University, 2010

Outstanding Undergraduate Award, Zhejiang University, 2009, 2008.

Employment

IBM Thomas J. Watson Research Center, Yorktown Heights, New York, USA

Research Intern **June, 2015 - August, 2015**

Work with Hongfei Li, Anshul Sheopuri in Customer Analytic team on IBM Xtify push intelligence platform. Developed deep learning models for GPS data from Xtify to predict users' click behavior and build customer profiles.

Yahoo! Labs, Sunnyvale, California, USA

Research Intern **May, 2014 - August, 2014**

Work with Andrew Gelfand, Suju Rajan in Personalization team on Yahoo! Aviate location-aware app recommendation. Developed a hierarchical Bayesian model for geographical segmentation problem in App usage. Continue academic collaboration through November on "Geographic Segmentation via Latent Poisson Factor Model".

Intel Lab, Santa Clara, California, USA

Research Intern **May, 2013 - August, 2013**

Work with Context-Aware Technology team of Intel Immersive Experience Research (IXR) division. Analyze smart phone usage data and propose a graphical model based algorithm to predict the potential contacts and applications on smart phones. Analyze NBC Universal movie data and fit regression models to predict future DVD/CD sales.

Microsoft R&D, Minghang, Shanghai, USA

Program Manager Intern **June, 2011 - June, 2012**

Work with Commerce team in Microsofts Server & Tools Business. Build SDK Wiki for Commerce platform partners. Design API prototype for guest purchase without Window Live ID authentication feature. Adapt platform working flow of payment instruments risk check and fraud detection for Microsoft Office 360 and Azure.

Teaching

Advanced Big Data Analytics (CSCI 686) *USC*

teaching assistant (Fall 2015): Led weekly section; redesigned assignments and mini-project on topic modeling to reflect developments in big data analysis;

Academic Service

Co-organizer, USC PhD Woman in Computer Science group, Los Angeles, 2013

Conference Volunteer, 24th AAAI conference on Artificial Intelligence, San Francisco, 2011

Student Local Chair, ACM Conference on Computer Supported Cooperative Work (CSCW), Hangzhou, 2011

Organizer, Probabilistic Intelligence Lab Machine Learning Seminar, Hangzhou, 2010

President, Chu KoChen Honors College Excellent Student League, Hangzhou, 2009

Computer Skills

- Languages: C/C++/C#, Python, Java, MATLAB script, R, SQL, Unix shell scripts.
- Softwares: Eclipse, Android Studio, Visual Studio, R Studio, MATLAB, Hadoop/Hive, MySQL, LaTeX, Vim, Microsoft Office.
- Operating Systems: Unix/Linux, Windows.