# Jiongqian Liang

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## **EDUCATION**

Aug 2013-May 2018 The Ohio State University

Columbus, Ohio, USA

Ph.D. in Computer Science and Engineering Advisor: Professor Srinivasan Parthasarathy

Sep 2009–Jun 2013 Beihang University

Beijing, China

Bachelor of Computer Science and Engineering GPA: 3.77/4.0; 3rd among 190 students (top 2%)

Nov 2012–Mar 2013 University of Tsukuba

Tsukuba, Ibaraki, Japan

Exchange student in College of Information Science

Advisor: Professor Hiroyuki Kitagawa

#### RESEARCH INTEREST

Deep Network Embedding, Outlier Detection, Graph Mining, Machine Learning

## SKILLS

- Proficient in **Data Mining** and **Machine Learning** methodologies.
- Proficient in big data infrastructure technologies, such as OpenMP, MPI, CUDA, Hadoop,
- o Proficient in writing code using C/C++, Python, Java, Go, Matlab and R to handle practical problems, especially those involve massive data.
- o Familiar with machine learning libraries such as TensorFlow, Theano, Scikit-Learn, etc.

## WORK EXPERIENCE

June 2018–Present Google

Mountain View, California

Machine Learning for Better Ads

Software Engineer

May 2017-Aug 2017 **Google** 

Ads Spam Team

Mountain View, California

Software Engineering Intern

• Develop a platform for understanding and explaining timeseries anomalies.

May 2016–Aug 2016 **Google** 

Kirkland, Washington

Ads Team

Software Engineering Intern

• Work on a machine learning project using TensorFlow and improve the precision and recall by

May 2015–Aug 2015 **Bell Labs** 

Dublin, Ireland

Data Analytics and Cloud Research Team

Research Scientist Intern (Nominated for UK&Ireland Recognition Award.)

- Work on semantic search in heterogeneous information networks to mine prioritized relationships between entities (paper is published in WWW'16).
- o Manager: Alessandra Sala. Mentor: Deepak Ajwani, Patrick Nicolson.

#### May 2013–Jul 2013 Adobe Systems Incorporated

Beijing, China

Digital Video and Suite Shared Technology Team

Software Development Intern

• Use JavaScript InfoVis Toolkit to visualize users' activity log of using Adobe products and analyze the corresponding usage patterns to support decision-making.

## ACADEMIC EXPERIENCE

Aug 2013 – Present Research Assistant

Department of Computer Science and Engineering The Ohio State University, Columbus, Ohio, USA

Nov 2012–Mar 2013 Undergraduate Research Fellow

Kitagawa Data Engineering Lab, College of Information Science University of Tsukuba, Tsukuba, Ibaraki, Japan

Jun 2011–Jun 2012 Research Intern

State Key Lab of Software Development Environment, CSE Department Beihang University, Beijing, China

## **PUBLICATIONS**

- J. Sun, B. Bandyopadhyay, A. Bashizade, J. Liang, P. Sadayappan, S. Parthasarathy. ATP: Directed Graph Embedding with Asymmetric Transitivity Preservation. In *Proceedings of the* AAAI Conference on Artificial Intelligence (AAAI'19).
- J. Liang, S. Gurukar, S. Parthasarathy. MILE: A Multi-Level Framework for Scalable Graph Embedding. In arXiv preprint arXiv:1802.09612 (paper under review), 2018.
- J. Liang, P. Jacobs, S. Parthasarathy. Human-Guided Flood Mapping: From Experts to the Crowd. In Proceedings of the Web Conference (WWW'18).
- J. Liang, P. Jacobs, J. Sun, S. Parthasarathy. Semi-supervised Embedding in Attributed Networks with Outliers. In Proceedings of 2018 SIAM International Conference on Data Mining (SDM'18).
- J. Liang, D. Ajwani, P. Nicolson, A. Sala, S. Parthasarathy. Prioritized Relationship Analysis in Heterogeneous Information Networks. In ACM Transactions on Knowledge Discovery from Data (TKDD'2018).
- J. Liang, S. Parthasarathy. Robust Contextual Outlier Detection: Where Context Meets Sparsity. In Proceedings of the 25th International Conference on Information and Knowledge Management (CIKM'16).
- J. Liang, D. Ajwani, P. Nicolson, A. Sala, S. Parthasarathy. What Links Alice and Bob? Matching and Ranking Semantic Patterns in Heterogeneous Networks. In Proceedings of the 25th International World Wide Web Conferences (WWW'16)
- J. Liang, D. Fuhry, D. Maung, A. Borstad, R. Crawfis, L. Gauthier, A. Nandi, S. Parthasarathy. Data Analytics Framework for A Game-based Rehabilitation System. In Proceedings of the 6th International Conference on Digital Health (DH'16).
- Y. Ruan, D. Fuhry, J. Liang, Y. Wang, and S. Parthasarathy. Community Discovery: Simple and Scalable Approaches. In *User Community Discovery*, pp. 23-54. Springer, 2015.

## HONORS AND AWARDS

- 2018 Graduate Research Award at Ohio State University
- 2016 SIGIR Student Travel Award
- 2016 Best of WWW 2016 Selection
- 2015 Nomination for Bell Labs UK&Ireland Recognition Award
- 2013 O'Donnell Fellowship in Ohio State University
- 2013 Excellent Graduate Award in Beihang University
- 2012 Japan Student Services Organization (JASSO) Scholarship
- 2011 First Class Prize in the China Undergraduate Math Contest in Modeling (Top 3%; First Author)
- 2011 First Class Prize in National Software Design and Development Contest, Beijing Regional
- 2010 Second Class Prize in College Mathematics Competition, Beijing Regional
- 2009 Merit Student of Guangdong Province (1/3000)

## PROFESSIONAL SERVICES

AAAI 2018, Program Committee Member

CIKM 2017, Program Committee Member

WWW 2017, Program Committee Member

ACM Transactions on Knowledge Discovery from Data (TKDD), Reviewer

Data Mining and Knowledge Discovery (DMKD), Reviewer IEEE/ACM Transactions on Networking (ToN), Reviewer IEEE Transactions on Systems, Man, and Cybernetics: Systems, Reviewer