

Yingyu Liang

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EDUCATION

2010-present	GEORGIA INSTITUTE OF TECHNOLOGY Ph.D., in School of Computer Science <ul style="list-style-type: none">♦ Adviser: Maria-Florina Balcan♦ GPA: 4.0/4.0	Atlanta, Georgia
2008-2010	TSINGHUA UNIVERSITY Master, in Department of Computer Science and Technology <ul style="list-style-type: none">♦ Adviser: Bo Zhang	Beijing, China
2004-2008	TSINGHUA UNIVERSITY Bachelor, in Department of Computer Science and Technology	Beijing, China

RESEARCH EXPERIENCE

2010-present	SCHOOL OF COMPUTER SCIENCE, GEORGIA INSTITUTE OF TECHNOLOGY <ul style="list-style-type: none">♦ Influence Maximization for Multiple Items under Realistic Constraints.♦ Modeling and Detecting Community Hierarchies in Networks.♦ Distributed Clustering and PCA on Networks, Large Scale Distributed Optimization.♦ Efficient Semi-supervised and Active Learning of Disjunctions.♦ Weak Hierarchical Clustering for Identifying Patterns in Data.♦ Tree Reconstruction under Noise and Its Applications in Graphical Model Construction, Phylogenetics and Network Tomography.♦ Clustering under Perturbation Resilience.
2008-2010	INTELLIGENT MEDIA GROUP, TSINGHUA UNIVERSITY <ul style="list-style-type: none">♦ Structural Statistics of Natural Images and its Application in Object Recognition.♦ Key Technology of Artificial Cognitive and Integrated Verification Platform for Unmanned Vehicles.♦ Video Copy Detection Task of TRECVID 2008/2009, a key video processing evaluation contest held by NIST. Served as the leader of the project.♦ National 242 Plan Project of China for Video Copy Detection. Served as the main designer.

ACTIVITIES

Nov 2012	MURI Symposium <ul style="list-style-type: none">• University of Maryland
Nov 2012	ARC-Yandex Workshop: Internet Topology and Economics <ul style="list-style-type: none">• Sponsor: Georgia Institute of Technology and Yandex LLC
Aug 2012	Summer School on Algorithmic Economics <ul style="list-style-type: none">• Sponsor: Carnegie Mellon University
Mar 2012	ARC Submodular Workshop <ul style="list-style-type: none">• Sponsor: Georgia Institute of Technology

June 2011

Machine Learning Summer School

- Sponsor: Purdue University
- scholarship received but withdrawn due to schedule conflicts

TALKS

- **Distributed k-median and k-means Clustering on General Topologies**
 - George Washington University, 2013
 - MURI Symposium, University of Maryland, 2013
 - HPArch Lab, Georgia Institute of Technology, 2013
- **Clustering under Perturbation Resilience**
 - University of Maryland, 2013
 - ACO student seminar, Georgia Institute of Technology, 2013
- **Distributed k-median/k-means Clustering on General Topologies**
 - ICML, 2013

PUBLICATIONS

- ♦ **Continuous-Time Budgeted Influence Maximization for Multiple Items.** With N. Du, L. Song, M. F. Balcan. Submitted for publication.
- ♦ **Distributed PCA and k-Means Clustering.** With M. F. Balcan, V. Kanchanapally. To appear in the Big Learning Workshop in NIPS 2013.
- ♦ **Clustering Perturbation Resilient k-Median Instances.** With M. F. Balcan. To appear in the Learning Faster from Easy Data Workshop in NIPS 2013.
- ♦ **Distributed k-means and k-median Clustering on General Communication Topologies.** With M. F. Balcan, S. Ehrlich. To appear in Advances in Neural Information Processing Systems (NIPS 2013).
- ♦ **Modeling and Detecting Community Hierarchies.** With M. F. Balcan. In the 2nd International Workshop on Similarity-Based Pattern Analysis and Recognition (SIMBAD 2013).
- ♦ **Efficient Semi-supervised and Active Learning of Disjunctions.** With M. F. Balcan, C. Berling, S. Ehrlich. In the 30th International Conference on Machine Learning (ICML 2013).
- ♦ **Clustering under Perturbation Resilience.** With M. F. Balcan. In 39th International Colloquium on Automata, Languages and Programming (ICALP 2012).
- ♦ **Learning Vocabulary-based Hashing with AdaBoost.** With J. Li, B. Zhang. In the 16th International Conference of Multimedia Modeling (MMM 2010).
- ♦ **Vocabulary-based Hashing for Image Search.** With J. Li, B. Zhang. In ACM International Conference on Multimedia (MM 2009).
- ♦ **THU-IMG at TRECVID 2009.** With B. Cao, J. Li, C. Zhu, etc. In TRECVID 2009.
- ♦ **THU and ICRC at TRECVID 2008.** With X. Liu, Z. Wang, etc. In TRECVID 2008.

HONORS AND AWARDS

- ♦ 2012 CMU Summer School on Algorithmic Economics Student Grant Winner
- ♦ 2011 Innovation in Computer Science Student Grant Winner
- ♦ 2008 Honor Graduate of Beijing
- ♦ 2008 Honor Graduate of Tsinghua University
- ♦ 2004-2009 Tsinghua University Top Scholarships

COMPUTER SKILLS

- ♦ Languages: C/C++, Python, Matlab, R