Curriculum Vitae Last modified date: Feb 27, 2016

Si Si

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EDUCATION

Ph.D. Dept. of Computer Science, The University of Texas at Austin 2010 - present

Center of Big Data Analytics
Advisor: Prof. Inderjit S. Dhillon

M.Phil. Dept. of Computer Science, The University of Hong Kong 2008 - 2010

Machine Learning and Data Mining Group
Advisors: Prof. Dacheng Tao and Prof. Kwok-Ping Chan

B.S. Dept of Computer Science, University of Sci. && Tech. of China (USTC), China 2004 - 2008

RESEARCH AND INDUSTRY EXPERIENCE

Research Assistant in the University of Texas at Austin 2010 - Present

- **Advisor**: Prof. Inderjit Dhillon
- Develop fast and scalable algorithms for large-scale machine learning.

Internship in Microsoft, Mountain View Jun. 2015 - Aug. 2015

- **Mentors**: Dr. Keerthi Selvaraj and Dr. Dhruv Mahajan
- Worked on multi-label learning problems.
- Investigated gradient boosted machines.

Internship in eBay Research Labs, San Jose May 2012 - Aug. 2012 && Jun 2013 - Aug 2013

- **Mentor**: Dr. Atish Das Sarma
- Investigated Matrix factorization for e-commerce data.
- Analyze the information flow between social networks and e-commerce platform.

Exchange Student in Nanyang Technological University, Singapore Sep. 2009 - Dec. 2009

- **Advisor**: Prof. Dacheng Tao
- Matrix Factorization.

Research Assistant in the University of Hong Kong 2008 - 2010

- **Advisors**: Prof. Dacheng Tao and Prof. Kwok-Ping Chan
- Transfer learning and Dimensionality reduction.

PUBLICATIONS

[1] Si Si, Donghyk Shin, Inderjit S. Dhillon, and Beresford N. Parlett, "*Multi-Scale Spectral Decomposition of Massive Graphs* ", in NIPS 2014.

[2] Cho-Jui Hsieh, Si Si, and Inderjit S. Dhillon, "*Fast Prediction for Large-Scale Kernel Machines* ", in NIPS 2014.

[3] Si Si, Cho-Jui Hsieh, and Inderjit S. Dhillon, "*Memory Efficient Kernel Approximation*", in ICML 2014.

[4] Cho-Jui Hsieh, Si Si, and Inderjit S. Dhillon, "*A Divide-and-Conquer Solver for Kernel Support Vector Machines* ", in ICML 2014.

[5] Si Si, Atish Das Sarma, Elizabeth F. Churchill, Neel Sundaresan,"*Beyond Modeling Private Actions: Predicting Social Shares*", in WWW 2014(short paper).

[6] Atish Das Sarma, Si Si, Elizabeth F. Churchill, Neel Sundaresan,"*The expression gap: do you like what you share?*", in WWW 2014(short paper).

[7] Hsiang-Fu Yu, Cho-Jui Hsieh, Si Si, and Inderjit S. Dhillon, "*Scalable Coordinate Descent Approaches to Parallel Matrix Factorization for Recommender Systems*", in Knowledge and Information Systems, 41(3): 793-819 (2013).

[8] Hsiang-Fu Yu, Cho-Jui Hsieh, Si Si, and Inderjit S. Dhillon, "*Scalable Coordinate Descent Approaches to Parallel Matrix Factorization for Recommender Systems*", in ICDM 2012.(**best paper award**)

[9] Si Si, Dacheng Tao and Kwok-Ping Chan, "*Social image annotation via cross-domain subspace learning*", in Multimedia Tools and Applications, 56(1): 91-108(2012).

[10] Donghyk Shin, Si Si, and Inderjit S. Dhillon, "*Multiscale Link Prediction*", in CIKM 2012.

[11] Si Si, Liu Wei, Dacheng Tao and Kwok-Ping Chan, "*Distribution Calibration in Riemannian Symmetric Space*", in IEEE Transactions on Systems, Man, and Cybernetics, Part B: Cybernetics, 41(4): 921-930 (2011).

[12] Si Si, Dacheng Tao and Bo Geng, "*Bregman Divergence Based Regularization for Transfer Subspace Learning*", in IEEE Transactions on Knowledge and Data Engineering, 22(7): 929-942 (2010).

[13] Si Si, Dacheng Tao and Kwok-Ping Chan, "*Cross-domain Face Recognition and Image Annotation by using Dimension Reduction*", in IEEE Transactions on Image Processing, 19(4): 1075-1086 (2010).

[14] Si Si, Dacheng Tao and Kwok-Ping Chan,"*Discriminative Hessian Eigenmaps for Face Recognition*", in ICASSP, 2010.

[15] Si Si, Dacheng Tao and Kwok-Ping Chan,"*Transfer Discriminative Logmaps*", in PCM, 2009.

AWARDS AND HONORS

- Best Paper Award in IEEE ICDM 2012. 2012
- MCD fellowship in UT-Austin. 2010 - 2013
- Best Paper Award in ICDM workshop on Internet Multimedia Mining. 2009
- The Postgraduate Scholarship in HKU. 2008 - 2010
- Outstanding Undergraduate Student Scholarship (golden, awarded for GPA in the top 5% of class) in **USTC**. 2005-2007

TEACHING EXPERIENCE

- Fall 2012,2013,2014(TA): SDS 329C, Practical Linear Algebra
- Fall 2011 (TA): CS301K, Foundations of Logical Thought
- Spring 2011 (TA): CS313K, Mathematical Tools for Computer Science
- Fall 2010 (TA): CS307, Introduction to Computer Science
- Fall 2009 (TA): CSIS1120A, Assembly Language Programming

SKILLS

- Programming: C/C++, MATLAB