

# BAILU DING

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## EDUCATION

2010-2016 Cornell University  
PhD Candidate · Department of Computer Science  
Research Area: Database · Advisor: Prof. Johannes Gehrke  
Expected to graduate in May 2016

2010-2013 Cornell University  
Master of Science in Computer Science

2006-2010 Fudan University  
Bachelor of Science · GPA: 3.7/4.0. Rank: 3/122 · Department of Computer Science

## WORK EXPERIENCE

2013.10-2014.5 Research Intern, MICROSOFT RESEARCH — Redmond  
Redesigned and implemented a shared log-structured transactional processing system (Hyder II) for increased parallelism.  
Mentor: Sudipto Das. Manager: Philip Bernstein.

2013.5-2013.8 Software Engineer Intern, LINKEDIN — Mountain View  
Designed and implemented a prototype of a hybrid system on transactions (row store) and analytics (column store).  
Mentor: Lin Qiao. Manager: Kapil Surlaker.

2012.5-2012.8 Software Engineer Intern, AMAZON — Seattle  
Designed disk scrubber and benchmarked SSD performance for AWS Aurora.  
Mentor: Benjamin Tobler. Manager: Pradeep Madhavarapu

2009.7-2009.9 Research Assistant, UNIVERSITY OF CALIFORNIA, LOS ANGELES — Los Angeles  
Designed and implemented belief propagation algorithms for stereo vision. Supervisor: Prof. Adnan Darwiche

2009.2-2009.7 Research Intern, MICROSOFT RESEARCH ASIA — Beijing  
Modeled reply-to relationships in web forums using latent topic models. Mentor: Jiang-Ming Yang

2007.9-2007.11 Software Engineer Intern, GOOGLE — Shanghai  
Studied visual impact of ads formatting on CTRs. Mentor: Yang Liu

## PUBLICATIONS

Bailu Ding, Lucja Kot, Magdalena Balazinska, Johannes Gehrke, Improving OCC Performance Through Transaction Batching, Submitted to SIGMOD 2016

Bailu Ding, Lucja Kot, Alan Demers, Johannes Gehrke, Centiman: Elastic, High Performance Optimistic Concurrency Control by Watermarking, ACM Symposium on Cloud Computing (SoCC) 2015

Philip A. Bernstein, Sudipto Das, Bailu Ding, Markus Pilman, Optimizing Optimistic Concurrency Control for Tree-Structured, Log-Structured Databases, ACM SIGMOD Conference 2015

Sudip Roy, Lucja Kot, Gabriel Bender, Bailu Ding, Hossein Hojjat, Christoph Koch, Nate Foster, Johannes Gehrke, The Homeostasis Protocol: Avoiding Transaction Coordination Through Program Analysis, ACM SIGMOD Conference 2015

Bailu Ding, Jiang-Ming Yang, Chong Wang, Rui Cai, Zhiwei Li, Lei Zhang, Who Talks to Whom: Modeling Latent Structures in Dialogue Documents, In NIPS 2009 Workshop on Applications for Topic Models: Text and Beyond

Z Zhang, J Guan, Bailu Ding, L Chen, S Zhou, Contact graphs of disk packings as a model of spatial planar networks, New Journal of Physics 11 (8), 083007

Y Qi, Z Zhang, Bailu Ding, S Zhou, J Guan, Structural and spectral properties of a family of deterministic recursive trees: rigorous solutions, Journal of Physics A: Mathematical and Theoretical 42 (16), 165103

## AWARDS

Amit Singhal Fellowship, Cornell University, 2010

ACM International Collegiate Programming Contest World Finals, 13th Place, 2008

ACM Asia Programming Contest, Nanjing, China, Champion, 2007

ACM Asia Programming Contest, Dhaka, Bangladesh, Second Place, 2007

## SKILLS

Experienced: C++, Java  
Familiar: Python, SQL, Matlab, LaTeX