Ping Li Cornell University

May 11, 2011

## **Brief Bio of Ping Li, Cornell University**

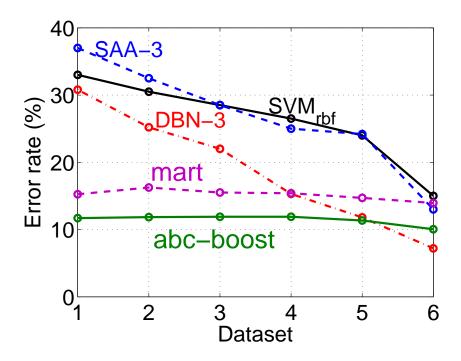
- Current Position: 2007 Present, Assistant Professor, Faculty of Computing and Information Science (CIS), Department of Statistical Science.
- Education: Ph.D. in Statistics (Stanford) and M.S. in CS (Stanford)
- Past Experience: 2004 2006, Summer Research Interns in Microsoft
  Research. 2003, Summer Software Engineer in Microsoft. 2002 Summer
  Software Engineer in Realnetworks. 2000 2003, Stanford 3D Imaging Lab
- Awards: 2009 Office of Naval Research (ONR) Young Investigator Award.
   Research Awards from Google and Microsoft.
- Research: Machine Learning, Information Retrieval, Massive Datasets

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## **Research in Tree-Based Boosting Algorithms: ABC-Boost**

ABC-Boost: Adaptive Base Class Boost for Multi-Class Classification

Error rates (smaller the better) comparisons with SVM, Deep Learning (DBN-3), and Prof. Friedman's MART algorithms, on 6 datasets used by Deep Learning Community. Results for Deep Learning and SVM were from prior publications.



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## **Techniques for Processing Massive Datasets**

- About 20 publications in e.g., KDD, NIPS, COLT, UAI, SODA.
- Research Highlight Article in Communications of ACM (To Appear)
   Theory and Applications of b-Bit Minwise Hashing, with Christian König
- Multiple categories of algorithms (for different data)
  - Random Projections, to shrink massive data matrix
  - Compressed Counting, to estimate moments and entropy of data streams.
  - Conditional Random Sampling, to sample effectively from sparse data
  - b-Bit Minwise Hashing, most recent development for binary (text) data.

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## **Contact Information of Ping Li**

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