

## EDUCATION

- 8/00–6/06      **Ph.D. in Computer Science**, with minor in Electrical Engineering  
California Institute of Technology, Pasadena, CA  
Thesis: Data Complexity in Machine Learning and Novel Classification Algorithms
- 8/00–6/02      **M.S. in Computer Science**, GPA: 4.2 / 4  
California Institute of Technology, Pasadena, CA
- 9/98–6/00      **M.Eng. with honor in Computer Science and Application**  
Tsinghua University, Beijing, China
- 9/94–6/98      **B.Eng. with honor in Computer Science and Technology**  
Tsinghua University, Beijing, China

## EXPERIENCE

- 7/06–Present      **Quantitative Analyst**, D. E. Shaw & Co., New York, NY
- 8/00–6/06      **Research Assistant**, California Institute of Technology, Pasadena, CA  
Machine Learning; Swarm Intelligence; Optimization; Computational Finance; Error-Correcting Codes; Probability; Monte Carlo Methods.
- 10/02–3/03      **Teaching Assistant**, California Institute of Technology, Pasadena, CA  
Graduate level CS156a: Learning Systems;  
Graduate level CS156b: Learning Systems.
- 10/01–12/01      **Teaching Assistant**, California Institute of Technology, Pasadena, CA  
Graduate level CS156b: Learning Systems;  
Graduate level CS129a: Information and Complexity.

## SELECTED PUBLICATIONS

- Hsuan-Tien Lin and Ling Li. Support vector machinery for infinite ensemble learning. *Journal of Machine Learning Research*, 9(Feb):285–312, 2008.
- Ling Li and Hsuan-Tien Lin. Optimizing 0/1 loss for perceptrons by random coordinate descent. In *Proceedings of the 2007 International Joint Conference on Neural Networks*, pp. 749–754, 2007.
- Ling Li and Hsuan-Tien Lin. Ordinal regression by extended binary classification. In B. Schölkopf et al., eds., *Advances in Neural Information Processing Systems 19*, pp. 865–872, 2007.
- Hsuan-Tien Lin and Ling Li. Large-margin thresholded ensembles for ordinal regression: Theory and practice. In J. Balcázar et al., eds., *Algorithmic Learning Theory: ALT 2006*, pp. 319–333, 2006.
- Ling Li. Multiclass boosting with repartitioning. In W. W. Cohen and A. Moore, eds., *ICML 2006: Proceedings of the 23<sup>rd</sup> International Conference on Machine Learning*, pp. 569–576, 2006.
- Ling Li and Yaser S. Abu-Mostafa. Data complexity in machine learning. Computer Science Technical Report CaltechCSTR:2006.004, California Institute of Technology, 2006.
- Hsuan-Tien Lin and Ling Li. Novel distance-based SVM kernels for infinite ensemble learning. In *Proceedings of the 12<sup>th</sup> International Conference on Neural Information Processing*, pp. 761–766, 2005.

- Hsuan-Tien Lin and Ling Li. Analysis of SAGE results with combined learning techniques. In P. Berka and B. Crémilleux, eds., *Proceedings of the ECML/PKDD 2005 Discovery Challenge*, pp. 102–113, 2005.
- Ling Li, Amrit Pratap, Hsuan-Tien Lin, and Yaser S. Abu-Mostafa. Improving generalization by data categorization. In A. Jorge et al., eds., *Knowledge Discovery in Databases: PKDD 2005*, pp. 157–168, 2005.
- Hsuan-Tien Lin and Ling Li. Infinite ensemble learning with support vector machines. In J. Gama et al., eds., *Machine Learning: ECML 2005*, pp. 242–254, 2005.
- Ling Li, Alcherio Martinoli, and Yaser S. Abu-Mostafa. Learning and measuring specialization in collaborative swarm systems. *Adaptive Behavior*, 12(3–4):199–212, 2004.
- Ling Li, Alcherio Martinoli, and Yaser S. Abu-Mostafa. Diversity and specialization in collaborative swarm systems. In C. Anderson and T. Balch, eds., *Proceedings of the 2<sup>nd</sup> International Workshop on the Mathematics and Algorithms of Social Insects*, pp. 91–98, 2003.
- Ling Li, Yaser S. Abu-Mostafa, and Amrit Pratap. CGBoost: Conjugate gradient in function space. Computer Science Technical Report CaltechCSTR:2003.007, California Institute of Technology, 2003.
- Ling Li, Alcherio Martinoli, and Yaser S. Abu-Mostafa. Emergent specialization in swarm systems. In H. Yin et al., eds., *Intelligent Data Engineering and Automated Learning — IDEAL 2002*, pp. 261–266, 2002.
- Fang Zheng, Zhanjiang Song, Ling Li, et al. The distance measure for line spectrum pairs applied to speech recognition. In *Proceedings of the 5<sup>th</sup> International Conference on Spoken Language Processing (ICSLP'98)*, 3:1123–1126, 1998.

## PROFESSIONAL SERVICES

- Committee member and reviewer for the *2005 IEEE Swarm Intelligence Symposium*
- Reviewer for the *International Journal of Computer Vision*, *IEEE Transactions on Neural Networks*, *King Saub University Journal*, and *Neurocomputing*

## HONORS AND AWARDS

- Caltech Social and Information Sciences Laboratory (SISL) Graduate Fellowship, 2004–2006
- Second at the TopCoder Collegiate Challenge, 2002
- Caltech Engineering and Applied Sciences Division Fellowship, 2000–2001
- Tsinghua Excellent (Master) Graduate, 2000
- IBM Scholarship for China Outstanding Students, 1999
- Tsinghua Excellent (Bachelor) Graduate (for top 3% of all the graduates), 1998
- Outstanding in Mathematical Contest in Modeling (MCM '98, USA), 1998
- “Ten Elites of Tsinghua University” (awarded to 10 outstanding students every 3 years), 1997
- Tsinghua Top-Grade Scholarship (annually awarded to 6 best students in Tsinghua), 1997
- First Prize in 1997 National Mathematical Contest in Modeling (China), 1997