

CURRICULUM VITAE

Zheng Li

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Education

Ph.D. candidate, Department of Computer Science, Duke University, Fall 2004 to present.

Bachelor of Science, Purdue University, May 8, 2004.

Highest Distinction, GPA 4.0 of 4.0

Major: Computer Science Honors and Mathematics

Minor: Psychology

Honors and Awards

Member, Phi Kappa Phi, 2004 to present.

Member, Upsilon Pi Epsilon, 2004 to present.

Clinical Faculty Arts and Sciences Endowed Fellowship, Duke University Graduate School, May 2004.

Lynn Fellowship, Purdue University Graduate School, March 2004 (declined).

Charles C. Chappelle Fellowship, Purdue University Graduate School, March 2004 (declined).

James B. Duke Fellowship, Duke University Graduate School, February 2004.

Member, Phi Beta Kappa, 2003 to present.

Dean's List and Semester Honors, Purdue University School of Science, 2001 to 2004.

Publications

Journal Articles

Li Z, O'Doherty JE, Hanson TL, Lebedev MA, Henriquez CS, & Nicolelis MAL. (2009) Unscented Kalman Filter for Brain-Machine Interfaces. *PLoS ONE*. 4(7): e6243. doi:10.1371/journal.pone.0006243

Pizlo Z, Stefanov E, Saalweachter J, Li Z, Haxhimusa Y, & Kropatsch WG. (2006) Traveling Salesman Problem: a Foveating Pyramid Model. *Journal of Problem Solving*. 1 (1), 83-101.

Pizlo Z & Li Z. (2005) Solving combinatorial problems: 15-puzzle. *Memory & Cognition*. 33 (6), 1069-1084.

Conference Papers

Pizlo Z & Li Z. (2004, January) Graph pyramids as models of human problem solving. *Proceedings of the SPIE-IS&T Conference on Electronic Imaging, Computational Imaging*. 5299, pp. 205-215. doi:10.1117/12.543423

Pizlo Z & Li Z. (2003, January). Pyramid algorithms as models of human cognition. *Proceedings of the SPIE-IS&T Conference on Electronic Imaging, Computational Imaging*. 5016, pp. 1-12.
doi:10.1117/12.479704

Conference Presentations

Li Z, O'Doherty JE, Lebedev MA, & Nicolelis MAL. (2009, October) Simultaneous BMI decoding and tuning model update using Bayesian regression. (Poster presentation) Society for Neuroscience 2009 Annual Meeting, Chicago, Illinois.

Li Z, O'Doherty JE, Hanson TL, Lebedev MA, Henriquez CS, & Nicolelis MAL. (2008, November) Unscented Kalman filter for brain-machine interfaces. (Poster presentation) Society for Neuroscience 2008 Annual Meeting, Washington, D.C.

Grant BD, Li Z, Hanson TL, O'Doherty JE, Lebedev MA, & Nicolelis MAL. (2008, November) Multipurpose, expandable suite for brain-machine interfaces. (Poster presentation) Society for Neuroscience 2008 Annual Meeting, Washington, D.C.

Li Z, O'Doherty JE, Hanson TL, Lebedev MA, Henriquez CS, & Nicolelis MAL. (2007, November) N-th order Kalman filter improves the performance of a brain machine interface for reaching. (Poster presentation) Society for Neuroscience 2007 Annual Meeting, San Diego, California.

Grant BD, Li Z, Hanson TL, O'Doherty JE, Lebedev MA, & Nicolelis MAL. (2007, November) Automated spike sorting of multiunit data for brain-machine interface applications. (Poster presentation) Society for Neuroscience 2007 Annual Meeting, San Diego, California.

Pizlo Z & Li Z. (2004, January) Graph pyramids as models of human problem solving. IS&T/SPIE 16th Annual Symposium, San Jose, California.

Li Z & Pizlo Z. (2003, November) The Role of Mental Representation in Problem Solving. (Poster presentation) 44th Annual Meeting of the Psychonomic Society, Vancouver, Canada.

Li Z & Pizlo Z. (2003, July) Pyramid model of human problem solving. 36th Annual Meeting of the Society for Mathematical Psychology, Weber State University, Ogden, Utah.

Li Z & Pizlo Z. (2003, March) Effect of Problem Presentation on Mental Representation and Performance in the M+M Puzzle. Hoosier Mental Life 2003, Purdue University, West Lafayette, Indiana.

Pizlo Z & Li Z. (2003, February) Human Problem Solving: A New Direction. Annual Interdisciplinary Conference, Jackson, Wyoming.

Pizlo Z & Li Z. (2003, January) Pyramid Algorithms as Models of Human Cognition. IS&T/SPIE 15th Annual Symposium, Santa Clara, California.

Pizlo Z & Li Z. (2002, November) Direction and Distance in Human Problem Solving. 43rd Annual Meeting of the Psychonomic Society, Kansas City, Missouri.

Pizlo Z & Li Z. (2002, July) Problem solving without search. 35th Annual Meeting of the Society for Mathematical Psychology, Miami University, Oxford, Ohio.

Employment History

Summer Undergraduate Research Intern

NASA Institute of Nanoelectronics and Computing and NSF Network for Computational Nanotechnology, Purdue University

June 2003 to August 2003

Research in scientific visualization at the Purdue University Rendering and Perceptualization Laboratory on simultaneous visualization of multiple volumetric datasets.

Computer Operator

Adaptive Programs, Office of the Dean of Students, Purdue University
September 2001 to May 2003

Design of system for storing digitized student records, implementation of programs for creation and maintenance of data, and digitization of documents from paper-based student records.

Laboratory Assistant

Virology Lab, Animal Disease Diagnostic Laboratory, Purdue University
August 2001 to December 2001

Cleaning, sterilizing, and preparing laboratory tools and materials.

Teaching Experience

Teaching Assistant, CPS 102 Discrete Math for Computer Science, Duke University, Fall 2005

Teaching Assistant, CPS 170 Methodologies in Artificial Intelligence, Duke University, Spring 2006

Teaching Assistant, CPS 270 Artificial Intelligence, Duke University, Fall 2006