

James Alan Riechel

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Education

University of California, Irvine, 2005, 2006. Work towards a second B.S. in mathematics, and a Ph.D. in statistics.

California State University, Northridge, 2003. Graduate seminar in the history of mathematics.

M.S. Computer Science, Georgia Institute of Technology, 1995

B.S. Information and Computer Science, University of California, Irvine, 1993

University of Leeds, 1990, 1991. Undergraduate exchange student.

Research Experience

Graduate research assistant 1994
College of Computing Georgia Institute of Technology
Created a robotic and computer vision system to identify dents in drums containing radioactive material.

Graduate research assistant 1994
College of Computing Georgia Institute of Technology
Investigated how novice chess players attempt to solve difficult chess problems which do have a clear solution.

Graduate research assistant 1993, 1994
College of Computing Georgia Institute of Technology
Integrated two components of a natural language processing and reasoning system, a syntax and semantics parser, and a creative story understanding system.

Undergraduate research assistant 1993
School of Information and Computer Science University of California, Irvine
Co-authored classified Lisp program in the field of natural language processing and reasoning.

Undergraduate research assistant 1992
Bonney Center for Learning and Memory University of California, Irvine
Humane behavioral experiments with rats ending in food and water rewards.

Undergraduate research assistant 1991, 1992
Department of Chemistry University of California, Irvine
Authored classified NMR pulse sequence simulations in Mathematica.

Teaching Experience

Graduate teaching assistant, control and concurrency, operating systems, and introduction to computer science, College of Computing, Georgia Institute of Technology, 1994, 1995

Teaching assistant, introduction to computer science, Tutorial Assistance Program, University of California, Irvine, 1992

Working Papers

“Failure-based reasoning” (2007). Submitted to AI Magazine, and the Journal of Artificial Intelligence Research (JAIR) for publication.

“A new compression and decompression algorithm for files and packets” (2007). Submitted to the ACM Transactions on Algorithms for publication.

“A simple load-balancing protocol for min-max depth-first search” (2007). Work-in-progress, Abstract only.

“A linear time algorithm for partial sorting” (2009). Submitted to ACM Transactions on Algorithms for publication.

“Recursive binary search for partially sorted data” (2009). Submitted to ACM Transaction on Algorithms for publication.

Books

“Chess Openings: New Theory” (2007).

“Chess: Four Articles in Opening Theory” (2007).

Honors and Awards

\$100,000 Chair Fellowship, Department of Statistics, School of Information and Computer Science, University of California, Irvine, September, 2006