Dong Zhou

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nosarthur.github.io   with work authorization in US

Summary

A scientist and programmer. Looking for opportunities in applying machine learning to solve social problems, especially in healthcare and education. Past experience includes image processing, mathematical modeling, computational mathematics/physics, stochastic process. Familiar with magnetic resonance imaging, quantum computing and biophysics.

Skills

Python, Matlab, C/C++, Linux shell scripts, d3.js, SQL

Machine learning, Image processing, computational physics/mathematics

Mathematical modeling, Optimization with regularization, Stochastic process

Experience

- Postdoc in radiology, Weill Medical College of Cornell University   2012–2016

  Solving ill-posed inverse problems in medical imaging. Developing probes for transcranial magnetic stimulation.

- Postdoc in physics, Yale University   2011–2012

  Simulating solid state quantum optics (circuit QED) systems. Developing schemes for quantum control and quantum gate.

- Research assistant, University of Wisconsin-Madison   2007–2011

  Studying quantum systems in the presence of classical noises. Developing scheme for quantum gate. Developing algorithm for graph isomorphism problem. Performing X-ray diffraction and synchrotron radiation experiments on nacre (mother of pearl) and other samples.

- Teaching assistant, University of Wisconsin-Madison   2006–2006

  Teaching introductory physics courses.

- Teaching assistant, University of Georgia-Madison   2004–2006

  Teaching introductory physics courses.

Education

- Ph.D in physics, University of Wisconsin-Madison   2006–2011
- Graduate study in physics, University of Georgia-Athens   2004–2006
- B.S. in physics, Honored Mixed Class, Zhejiang University, China   2000–2004

Honors and Awards

- International Society for Magnetic Resonance in Medicine (ISMRM) Merit Award, magna cum laude, 2014
- International Student Academic Achievement Award, UW-Madison, 2011
- Ray and Anne Herb Award for Wisconsin Distinguished Graduate Fellowship, 2008

- Emanuel R. Piore Award for Highest Scorer on the Qualifier Exam, UW-Madison, 2007
- University Housing's Favorite Instructor Award for Fall 2006, UW-Madison, 2006
- Van Vleck Fellowship for Graduate Students in Physics, UW-Madison, 2006
- Honored Graduate of Zhejiang University, China, 2004
- Honorary Enrollment, Zhejiang University, China, 2000
- Tan Jiazhen (C. C. Tan) Scholarship for Outstanding High School Student in Biology, 1999
- Kang Hui Scholarship for Highest Scorer in High School Entrace Exam, Hangzhou, China, 1996

PUBLICATIONS AND SERVICES

Author for 27 journal articles and reviewer for 11 journals.