Dong Zhou

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(917) 207-8391 (mobile) 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 Solved ill-posed inverse problems in medical imaging using Matlab, C and C⁺⁺. Developed probes for transcranial magnetic stimulation.
- Postdoc in physics, Yale University 2011–2012 Simulated solid state quantum optics (circuit QED) systems using Python. Developed schemes for quantum control and quantum gate.
- Research assistant, University of Wisconsin-Madison 2007–2011 Studied quantum systems in the presence of classical noises using Matlab and C⁺⁺. Developed scheme for quantum gate and quamtum control. Developed algorithm for graph isomorphism problem. Performed X-ray diffraction and synchrotron radiation experiments on nacre (mother of pearl) and other samples.

EDUCATION

| • Ph.D in physics, University of Wisconsin-Madison | 2006 – 2011 |
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| • 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
- \bullet 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.