GUANG YANG

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EDUCATION

UNIVERSITY OF CALIFORNIA, BERKELEY, Berkeley, CA
Candidate for M.S. in Industrial Engineering & Operations Research Expected – May 2014

- *Course work*: Statistical Learning Theory, Mathematical Programming, Applied Statistic Processes, Portfolio Management, Financial Engineering

RICE UNIVERSITY, Houston, TX
B.A. in Computational and Applied Mathematics (CAAM) Aug 2011 – May 2013

- *Course work*: Numerical Analysis, Optimization Theory, Applied Matrix Analysis, Complex Analysis, Probability and Statistics

APPALACHIAN STATE UNIVERSITY, Boone, NC
Completed courses in Mathematics and Actuarial Science Aug 2009 – May 2011

- *Course work*: Analysis, Abstract Algebra, Differential Equations, Cryptography, Financial Math

AWARDS

- UC Berkeley Graduate Fellowship 2013
- CAAM-Chevron Undergraduate Research Prize 2013
- Meritorious winner, COMAP Mathematical Contest in Modeling 2011
- 1st Place, Rice ASME Engineering Design Competitions 2011, 2012

EXPERIENCE

BERKELEY COMPUTATIONAL OPTIMIZATION LAB, Berkeley, CA
Graduate Student Research (Advisor: Dr Alper Atamtürk) Aug 2013 – Present

- Developed an algorithm to find the region in the prostate that cannot be reached by needles without puncturing nearby healthy organs in prostate brachytherapy

TEXAS CHILDREN'S HOSPITAL HEART CENTER, Houston, TX
CAAM Senior Design (Advisors: Drs Mark Embree, Thomas Callaghan) Aug 2012 – May 2013

- Developed a matlab GUI that extracts cardiac pressure gradients from echocardiogram data using smoothing splines and simplified Navier-Stokes equation.

RICE UNIVERSITY, Houston, TX
NSF, VIGRE Summer Internship (Advisor: Dr Wotao Yin) May – Jul 2012

- Applied the machine learning method, Regularized Dual Averaging (RDA) method, to classify electroencephalogram recordings of patients performing a face versus car categorization task

NATIONAL INSTITUTE FOR MATHEMATICAL AND BIOLOGICAL SYNTHESIS (NIMBioS), Knoxville, TN
NSF, Research Experiences for Undergraduates (Advisor: Dr Suzanne Lenhart) May – Jul 2010

- Built a model in R to simulate the disease dynamics of Johne's Disease in a U.S. dairy herd. My team was able to examine the effectiveness of existing and newly developed testing methods and perform economic analysis on the control strategies

LEADERSHIP

- Head Academic Fellow, Will Rice College. Led 25+ Academic Fellows in providing academic assistance to underclassmen and organizing events to stimulate the intellectual environment
- President, Rice Table Tennis Club. Organized the campus-wide 2012 IEW Tournament

SKILLS

- *Computer*: AMPL, C++, Latex, Maple, Matlab, Microsoft Office Suite, R
- *Language*: English (Native), Mandarin Chinese (Native), French (Beginner)