

# GUANG YANG

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## EDUCATION

**UNIVERSITY OF CALIFORNIA, BERKELEY**, Berkeley, CA

*Candidate for M.S. in Industrial Engineering & Operations Research*

Expected – Dec 2014

- *Course work:* Supply Chain and Logistics Management, 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 in Matlab 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 John'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, Latex, Maple, Matlab, Microsoft Office Suite, R
- *Language:* English (Native), Mandarin Chinese (Native), French (Beginner)