

## Yadong Lu

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| CONTACT INFORMATION                 | Donald Bren Hall<br>University of California, Irvine   | Phone: (518)3344636<br>E-mail: yadongl1@uci.edu  |
| INTERESTS                           | Convolution Neural Network, Bayesian statistics, and their applications.   |  |
| EDUCATION                           | <b>Sichuan University</b> , Mathematics, B.S.<br>Honored Class, funded by National Pilot Program of Chinese Universities.<br>GPA: 3.72/4.0(3rd in ranking), Adviser: Xiaojing Shen<br><b>National University of Singapore</b> , Applied Math<br>One-year Study Abroad Programme.<br><b>University of California, Irvine</b> , PhD in Statistics  | Aug 2012 - 2016<br><br><br>2014 - 2015<br><br>Sept 2016  |
| TECHNICAL SKILLS                    | <b>Programming Languages:</b> C, Python; Matlab, R; Latex;   |  |
| TEST SCORES                         | <b>GRE:</b> Quantitative Reasoning: 170/170, Verbal Reasoning: 157/170   |  |
| RESEARCH EXPERIENCES AND ACTIVITIES | <b>Summer School on Knot Theory</b><br>Nankai University, funded by National Pilot Project.<br><b>Summer Seminars of Computational Biology</b><br>With Prof. Michael Waterman, Prof. Fengzhu Sun. Fudan University.<br><b>University of California, Irvine</b> , Department of Mathematics<br>Visiting program on advanced probability and stochastic process.<br><b>Optimal Search and Rescue Model Updated by Bayesian method</b><br><ul style="list-style-type: none"><li>This paper aims at searching for crashed planes in ocean area. Major work include: simulation of crash trajectory and optimal search method using Dinkelbach's algorithm.</li><li>The result shows that the systematic plan developed using various types of searching planes helps to find the flight AF477 within 2 hours.</li></ul> <b>Impact of Monetary Policy on Stock Market</b><br><ul style="list-style-type: none"><li>With Prof. Chan Yiu Man, at National University of Singapore.</li><li>Several regression models was established to optimized to analyze the change of SSE(Shanghai Stock Exchange) Composite Index under the influence of monetary policy in China. policy change.</li></ul> <b>Quantative Trading Strategies for Achieving Alpha</b><br><ul style="list-style-type: none"><li>With Prof. Chang Liu, at Sichuan University</li><li>Historical data within 3000 trading days was crawled to backtest strategies .Different profitable factors was figured out and was combined to construct strategies. Include instensive Python programming.</li></ul> <b>Bayesian Estimation of Heston Stochastic Volatility Model</b><br><ul style="list-style-type: none"><li>With Dr. Liang Wu from Brown University.</li><li>This paper develops algorithms of Gibbs sampling for the Heston (1993) Stochastic Volatility Model. We estimate the parameters in the model and predict the volatility using the data in Shanghai Stock Exchange.</li></ul> | Aug 2014<br><br>July 2015<br>Dec 2015<br>Jan 2015<br><br><br><br><br><br><br><br><br><br>2015-16 |
| CONTRIBUTED PRESENTATIONS           | <b>Seminars on Probability with Martingale</b> , Sichuan University<br><ul style="list-style-type: none"><li>Doob's optional Stopping time Theorem and its implications.</li></ul>   | Feb-Jun 2014   |

**Seminars on Markov Chain Monte Carlo Methods**, Sichuan University  
Sept-Oct 2015

- Generation of random variable; The Metropolis Hastings Algorithm; The Two Stage Gibbs Sampler.

AWARDS AND  
SCHOLARSHIPS

- Outstanding Undergraduate Student Award, Sichuan University (2016)
- Honorable Mention, Mathematical Contest in Modeling (MCM), COMAP, U.S. (2015)
- Scholarship of Temasek Foundation, National University of Singapore (2014)
- Fellowship of Chinese National Pilot Project for Fostering Top-notch Students in Fundamental Science, Sichuan University (2013-2016)
- First Prize Award of Mathematical Modeling Competition, Sichuan University (2013)