Yadong Lu

CONTACT INFORMATION

2243 Donald Bren Hall
University of California, Irvine

Phone: (518)334-4626
E-mail: yadongl1@uci.edu

INTERESTS

Deep Learning Algorithms, Statistical Modeling, Bayesian Optimization.

EDUCATION

University of California, Irvine, Statistics, PhD student 2016.9-now
GPA: 3.97/4.0, Advisor: Pierre Baldi

Sichuan University, Mathematics, B.S. 2012 - 2016
Honor Class, 4 year National Pilot Program Fellowship receipient.

National University of Singapore, Applied Math 2014 - 2015
Temasek Foundation Scholarship, one-year study abroad programme.

TECHNICAL SKILLS

Programming Languages: Python, C; Matlab, R; Latex;
Deep Learning Related: Tensorflow, Keras, Theano, Pandas, Linux

TEST SCORES

GRE: Quantitative Reasoning: 170/170, Verbal Reasoning: 157/170

RESEARCH AND INTERN EXPERIENCES

Sherpa: Hyperparameter Tuning Machine for Neural Networks 2017.9-now

- Sherpa aims to provide a fast and parallel automatic hyperparameter search framework for training various kinds of deep neural networks.
- Lead the development of bayesian optimization algorithms for Sherpa.

Antihydrogen Particle Detection by Deep Learning 2017.6-now

- A joint project with ASACUSA at CERN.
- Developed a package for analyzing over 3 million real annilation events generated from ASACUSA experiments. Wrote algorithms to efficiently separated the rising edges within the data.
- Propsed resnet-like deep neural network as a novel technique to distinguish antimatter signals from backgrond noise. Our model outperforms the existing vertex construction algorithm.

Deep Target Algorithms and Random Backpropagation 2016.9-12

- With Prof. Pierre Baldi at UCI.
- Developed and implemented several deep target learning algorithms and Random Backpropagation (RBP) Rules in both Theano and Tenserflow. Tested the algorithms on several benchmark datasets using multiple GPUs.
- Reseach on the proof of convergence properties of RBP algorithms. Constantly explore and evaluate new RBP rules.

Quantative Trading Algorithms for Achieving Alpha 2016.3-6

- Internship at Huaxi Futures Co., Ltd.
- Historical data within 3000 trading days was crawled from web using python to backtest trading strategies. Developed and implemented several algorithms to select profitable factors as trading strategies.
- Improved the automatic trading system by adding new strategies.

EGARCH Model with Leverage Effect 2015.10-2016.4

- With Dr. Liang Wu from Brown University.
- This paper find empirical evidence of Anti-leverage effect in Chinese stock market. An analytical result regarding approximation of option prices is solved. Algorithms based on the result is developed and implemented.
- Implied volatility is calculated using the option prices solved by the theorem in this paper, where it showes anti-leverage effect.

HOBBIES

I have been a competitve Go player (4th dan) for 10 years. I served as point guard in my college basketball team and played for tournaments every year.