Zhang Weiwei

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Address: 60 Dakota Crescent, Singapore, 390060 Date of Birth: 27^{th} July 1994

Education

- **Department of Mathematics, National University of Singapore** 2016 - Present
  - PhD candidature with specialization in Financial Mathematics *Supervisor : Zhou Chao*
  - NUS research scholarship from 2017 to 2019
- **Department of Mathematics, Zhejiang University** 2012 - 2016
  - Bachelor of Science degree in Mathematics and Applied Mathematics
  - Second-Class scholarship for outstanding students in 2013

Research Projects

- **Deep learning algorithm solving transaction cost problems**
  - Using Deep Neural Networks to approximate optimal trading strategies of portfolio selection problems with proportional transaction cost
  - Accepted for publication in the proceedings of IEEE Computational Intelligence for Financial Engineering and Economics 2019
- **BSDE approach to solve portfolio problem under alpha-Heston model**
  - Construct an explicit solution of BSDE with respect to value function
  - Monte Carlo simulation of alpha-Heston model in variance option pricing
- **Deep learning algorithm to solve high dimensional BSDEs**
  - Deep Learning solver of Asian option pricing
  - High dimensional European option pricing problem with exotic contingent claims

Internship

- **Quantitative Research Assistant, ZhongDa Futures** May 2017 - Jul 2017
  - Compute implied volatility and Greeks of 50 ETF Option in Chinese market data
  - Compute optimal delta hedging strategies of selling call and put options simultaneously by a linear programming approach
  - Revenue decomposition with respect to Greeks

Languages & Softwares

- **Expert :** Python, Matlab, LaTeX, C++
- **Intermediate :** C, R