Luhao Zhang

CONTACT INFORMATION

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EDUCATION

The University of Texas at Austin , Austin, TX, USA

Graduate Student in Mathematics — Aug. 2018 - Present

Xi'an Jiaotong University (XJTU), Xi'an, Shaanxi China

Preparatory program for the Honors Youth Program — Sept. 2012 - 2013
B.S. in Mathematics and Applied Mathematics (the Honors Science Program) — Aug. 2014 - 2018

Columbia University in the City of New York, New York City, New York USA

Visiting Undergraduate Student — Jan. - May 2016

University of California, Berkeley, Berkeley, California USA

Visiting Undergraduate Student — Jan. - May 2017

University of Texas at Austin, Austin, Texas USA

Visiting Student Intern for Research Assitant — Sept. - Dec. 2017

INTERNSHIP EXPERIENCE

China International Capital Corporation (CICC), Beijing, China

Private Equity Analyst (Intern) — **Dec. 2017 - Feb. 2018**

- Conducted commercial due diligence and comparable companies analysis in an pre-IPO investment deal of a power battery company
- Performed industry and firm specific research on an electric logistics car company
- Implemented industry research on Chinas PE/VC market and governmental investment funds

Chinese Academy of Sciences, Beijing, China

Research Assitant — **July - Sept. 2017, July - Sept. 2016**
National Undergraduate Student Innovation Program (fellowship funded)
Visting Researcher for the State Key Laboratory of Scientific and Engineering Computing (LSEC)

- Topics: Machine learning applications on the model for ranking personal credit (in practice)
- Advisor: Yuhong Dai, Feng Kang Chair Professor
- Machine Learning, Statistical Model Selection, Non-supervised Learning for Factor Selecting
- My job: Selecting and weighing items by AHP in Matlab, cleaning data and make a local optimization of the missing data.

Beijing Institute of Big Data Research, Beijing, China

Research Assitant — **July 2016 - Sept. 2016**

- Topics: Conception, development and implementation of real-time algorithms on the illiquidity in stock returns
- Advisor: Yao Wang
- Sparse Evolutive models, Multiscale Representations, Real-time Algorithm Design

- My job: Testing alqha, Model practicing in python and local optimizing in algorithm

Academic Experience

University of Texas at Austin, Austin, Texas USA

Research Intern **Sept - Dec. 2017**

- Topics: Several inverse problems in partial differential equations
- Advisor: Kui Ren.
- Invariance Learning, Scattering Representations of Stochastic Processes
- My job: Performing AM in code space and doing local analysis

University of California, Berkeley, Berkeley, California USA

Research Trainee **Mar. 2017 - June 2017**

- Topics: Data-driven stochastic model reduction
- Advisor: Fei Lu
- Data-driven NARMA Model, Stochastic Differential Equations, Applications to Meteorology
- My job: Performing DNN in model practicing and algorithm realizing by Matlab

Xi'an Jiaotong University, Xi'an, Shaanxi China

Research Trainee **July. 2017 - Present**

- Topics: Dynamic behaviour of FitzHugh-Nagumo model
- Advisor: Yanmei Kang
- Excitable Biochemical Media, Neuronal Dynamics, Internal Noise, Spatial Coherence Resonance
- My Job: Paper writing and process visualization

Research Trainee **Sept. 2016 - Dec. 2016**

- Topics: Identified large numbers of risk schizophrenia-associated genetic loci with PCI method
- Advisor: Chen Qiao
- Deep Belief Network, Feature Back-selection Method, Space Saving Ability, Accuracy Rate
- My job: Seminar organizer and algorithm realizing

Papers

Qiao C., Sun K., Zhang L. & Zhang W. *Feature selection method by DL on handwritten digits datasets*, in preparation.

Awards and Patents

- Certificate of Utility Model Patent: ZL 2013 2 0431220.0. Jan. 2014
  This patent consists of a new design for cradles with adjustable supporting area according to the growth of babies.
- Honorable Mention Prize in 2015 Interdisciplinary Contest in Modeling. Feb. 2015
- Honorable Mention Prize in 2017 Interdisciplinary Contest in Modeling. Feb. 2017

Computer Skills

- Math-related: Matlab, Mathematica, R, LaTeX.
- Programming: C++.

Standardized Tests

TOEFL: 95 (R:27, L:24, S:19, W:25)
IELTS: 7 (R:8, L:7, S:6, W:6)
GRE: 324 (V:156, Q:168)