

# CHAO ZHANG

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## EDUCATION

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### **Peking University**

Undergraduate

Department of Statistics, School of Mathematical Sciences

*Sep 2012 - Jul 2016*

Major GPA: 3.8/4

### **Peking University**

Mphil

Center for Data Science

*Sep 2016 - Jul 2019*

GPA Rank: 1/50

## TECHNICAL STRENGTHS

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### **Programming Languages**

Python, R, Tensorflow, L<sup>A</sup>T<sub>E</sub>X

## RESEARCH EXPERIENCE

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### **Horse Racing Betting**

*Research Assistant*

*Mar 2016 - Jul 2017*

*Peking University*

- Cleaned data crawled from websites
- Built statistical machine learning models to predict the performance for each horse

### **Prediction of Stock Return**

*Intern*

*Jul 2017 - Dec 2017*

*Golden Kelly Co.*

- Crawled stock daily trade data from websites
- Created a brand-new deep learning model to analyze the performance for individual stocks
- Achieved better returns than the Benchmark index

### **Robustness of Machine Learning Model**

*Intern*

*Jan 2018 - Jun 2018*

*Intel Labs China*

- Explored intrinsic relationships between models' sparsity and adversarial robustness

### **Asset Pricing via Machine Learning**

*Research Assistant*

*Sep 2018 - Present*

*Chinese University of Hong Kong*

- Trying to synthesize the field of machine learning with measuring asset risk premia

## HONORS & AWARDS

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2013 & 2014, Cyrus Tang Scholarship

2015, National Inspirational Scholarship (10%)

2016, Outstanding Graduates Awards (20%)

2016, Special Scholarship (10%)

2017 & 2018, National Scholarship (3%<sup>2</sup>)

2018, NIPS Travel Awards

## RELEVANT COURSES

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### Core Courses

Mathematical Analysis  
Advanced Algebra  
Mathematical Statistics  
Statistical Learning  
Applied Regression Analysis  
Probability Theory

### Other Courses

Securities Investment  
Economics  
C Programming  
Data Structure

## PUBLISHED PAPERS

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**CNN-LSTM Neural Network Model for Quantitative Strategy Analysis in Stock Markets**  
2017

*Fintech*

*ICONIP 2017*

- Established a brand-new deep learning model to analyze the performance for individual stocks

**Sparse DNNs with Improved Adversarial Robustness**

2018

*Machine Learning*

*NeurIPS 2018*

- Analysed potential relationships between the sparsity and robustness of classifiers to untargeted white-box adversarial attacks, from both theoretical and practical perspectives

## EXTRA-CIRRICULAR

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France Excellence Summer School: Data Science for Document Analysis and Understanding(partial scholarship)

Machine Learning Course at the Technion(full scholarship), Score: 99/100

CFA level-1(Passed)

Volunteer of China Foundation for Poverty Alleviation