

# Yucheng Guo

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## EDUCATION

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### PRINCETON UNIVERSITY

Ph.D. Candidate in Operations Research & Financial Engineering, GPA: 4.00/4.00

*Princeton, NJ*  
*Expected 05/26*

- Research Direction: Probabilistic approaches to PDE problems with free boundary.
- Courses: Statistical Theory for Data Science, Optimization, Stochastic Calculus, Stochastic Control.

### FUDAN UNIVERSITY

B.S. in Mathematics, GPA: 3.85/4.00, Major GPA: 4.00/4.00

*Shanghai, China*  
*Conferred 06/21*

- Bu-chin Su honor class.
- Exchange Experience: University of Chicago, Department of Mathematics, 09/19 - 12/19.

## PROFESSIONAL EXPERIENCE

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### DYNAMIC TECHNOLOGY LAB

Quantitative Researcher Intern

*Shanghai, China*  
*01/21 - 05/21*

- Assisted in factor analysis and alpha mining based on mid-frequency equity data.
- Researched in the literature on statistical arbitrage models.
- Programmed trading strategies and conducted back-tests using Python and C++.

### HUAWEI TECHNOLOGIES

Theoretical Researcher Intern, 2012 Lab

*Shanghai, China*  
*07/20 - 10/20*

- Researched and made presentations on image-video processing and computer vision.
- Assisted in algorithm design for video compression, combining classical methods, compressed sensing and machine learning.
- Programmed and tested the algorithms on real camera video datasets using Python.

## ACADEMIC EXPERIENCE

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Research Projects:

- **Stefan problem with surface tension: uniqueness of physical solutions under radial symmetry.** Accepted by *Archive for Rational Mechanics and Analysis*.
- **Cascade equation for physical jumps of Stefan problem in general dimensions and its probabilistic solution.** Work in progress.

Services and Activities:

- Referee for *Annals of Applied Probability*.
- Talks given at IMSI (Chicago), UCSD, Princeton.

## SELECTED AWARDS

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Bronzes in Analysis and in Probability at *11th S.-T. Yau College Student Mathematics Contests* 10/20  
National Scholarship: Top 1%, Selected by Fudan University 09/19  
Second Prize in Final at *9th Chinese College Mathematics Competitions* 05/18

## COMPUTATIONAL SKILLS / OTHER

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Programming Languages: Python, C/C++, R

Certification: Deep Learning Specialization on *Coursera*

Languages: English (fluent), Mandarin Chinese (native), Spanish (beginner)