

## ZIBIN ZHEN

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### EDUCATION

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#### NEW YORK UNIVERSITY

New York, NY

#### The Courant Institute of Mathematical Sciences

#### MS in Mathematics in Finance (expected – Dec. 2020)

- **Coursework:** Risk-neutral valuation, factor models, Black-Litterman, Brownian motion, Black-Scholes and application to stochastic processes, OOP in Java, Monte Carlo simulation

#### NEW YORK UNIVERSITY

New York, NY

#### BA in Economics and Mathematics (2015 – 2019)

- **Coursework:** Linear algebra, probability, differential equations, econometrics, data structures
- **Honors:** Phi Beta Kappa, Magna Cum Laude, Gopal Varadhan Scholarship at Courant

### EXPERIENCE

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#### GLOBAL AI CORPORATION

New York, NY

#### *Quantitative Strategy Intern* (Sept. 2019 – present)

- Transform raw stress indicators into 5 subindices based on empirical CDF and computation of order statistics; then aggregate them into the Composite Indicator of Systemic Stress (CISS)
- Analyze statistical significance of 11 ETFs' contemporaneous returns on CISS's exponentially weighted moving average with window sizes 4 and 40

#### HUATAI SECURITIES CO., LTD.

Nanjing, China

#### *Quantitative Analyst Intern* (Jul. 2018 – Aug. 2018)

- Retrieved real-time market data from Wind; then conducted data cleansing using STATA
- Performed validity test to risk factors using multiple linear regression model that predicted stocks' return with risk factors and industry factors
- Employed event study method to examine market reactions to M&A of A-share listed companies
- Estimated each stock's normal return with market model; then calculated its cumulative abnormal return and validated effect of M&A through hypothesis testing

#### NINE COURSERS ASSET MANAGEMENT CO., LTD.

Guangzhou, China

#### *Quantitative Analyst Intern* (Jun. 2017 – Aug. 2017)

- Built single-factor test framework to sift high-quality stocks in CSI 300 using Python
- Calculated each stock's daily value associated with factors in financial ratios; then for each factor, categorized the stock pool into 5 groups based on their values for backtesting
- Determined validity and stability of factors by visualizing their monotonicity

### PROJECTS

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#### NEW YORK UNIVERSITY

New York, NY

#### *Interest Rate Parity Analysis*

- Applied autoregressive distributed lag model to explore correlation between China-US monthly average interest rate differentials and their exchange rates from Sept. 2012 to Sept. 2018
- Checked unit root via Dickey Fuller test; sought optimal lag periods based on AIC and determined the predictive power of interest rate differentials on exchange rates via Granger causality test

#### *Course Registration System (Java)*

- Designed system for administrator to manage and students to select courses with OOP paradigm
- Implemented serialization/deserialization mechanism to ensure consistent state of system

#### *Consulting Queue Management (Java)*

- Modeled customers and service-counter on a typical day from 9 am to 5 pm using queue
- Calculated consultant's idle time, each customer's waiting time, and number of customers served

### COMPUTER SKILLS/OTHER

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**Programming Languages:** Python, Java, MATLAB, STATA

**Languages:** Mandarin (native), Cantonese (native), English (fluent)

**Citizenship:** US Permanent Resident