

# YIBING (GRACE) GU

Address: 10 Weston Avenue, Apt. 308, Quincy, MA 02170

Email: yibing.gu@sloan.mit.edu

Mobile: +1 (617) 750-6768

## EDUCATION

### MIT SLOAN SCHOOL OF MANAGEMENT

Cambridge, MA

*Master of Finance*

2011- June 2012

- Coursework: Statistical Learning and Data Mining (Ph.D. level), Financial Economics (Ph.D. level), Analytics of Finance, Investment, Fixed Income, Options and Futures Markets, Foreign Exchange Markets from a Quantitative Perspective, Proseminar in Financial Engineering, Retirement Finance and Asset Management
- GPA: 4.7/5.0

### SHANGHAI JIAO TONG UNIVERSITY

Shanghai, China

*Bachelor of Economics, Finance (with concentration in Mathematical Finance)*

2007-2011

- Major coursework: Microeconomics, Macroeconomics, Econometrics, Financial Mathematics, Time Series Analysis
- Other quantitative coursework: Mathematical Analysis, Calculus, Stochastic Processes, Ordinary Differential Equations, Linear Algebra, Probability and Statistics, Mathematical Modeling, C++, MATLAB, Database
- Major GPA: 4.0/4.3(90.74/100), ranking 1/30, won top scholarship in School of Economics every year

## RESEARCH EXPERIENCES

### Risk Factors Analysis in Multi-Asset Class Portfolios *Extended Research at MIT*

Feb.-Jun.2012

- Study the risk factors in multi-asset class portfolios and the dynamics of variance-covariance structure
- Use methods such as Factor Analysis, Principal Component Analysis, GARCH, and Dynamic Conditional Correlation

### Systemic Risk in the US Equity Market

*Joint Research Project between MIT and CAMBRIDGE ASSOCIATES*

Jan.2012

- Decomposed the equity market risk, captured the systemic risk with Absorption Ratio and designed trading strategies
- Built a user-friendly interface in Excel VBA, providing up-to-date daily analysis with the connection to Bloomberg

### Liquidity in the US Bond Market

*MIT Financial Engineering course project sponsored by FIDELITY INVESTMENTS*

Oct.-Nov.2011

- Developed methods to generate systematic liquidity risk factor (SLIQ) as the liquidity measure for the US bond market
- Analyzed bond yield sensitivity to SLIQ based on different market sectors, bond characteristics and default probability
- Estimated the default and liquidity components of the bond's spread

### Chinese Money Market Analysis Based on Single Factor Interest Rate Model *Bachelor's Thesis*

Mar.-Jun.2011

- Concluded from statistical analysis that the seven-day Shibor was the most appropriate benchmark interest rate in China
- Performed GMM estimation on the dynamics of seven-day Shibor within the framework of single-factor short-term interest rate models, including Vasicek, CIR SR, Dothan, GBM, Brennan-Schwartz, CIR VR and CKLS

### Chinese A-Share Stock Market Return Analysis *Time Series Analysis course project*

Apr.-Jun.2010

- Predicted short and medium time horizon stock market returns based on the theory of consumption-wealth ratio
- Implemented empirical analysis using cointegration analysis and Error Correction Model

## INTERNSHIPS

### CHINA INTERNATIONAL CAPITAL CORPORATION (CICC)

Shanghai, China

*Investment Banking Division, Full-time Intern*

Mar.-Jun.2011

- Collaborated with the deal team to produce prospectus for a public offering of convertible bonds in A-share market
- Worked on a pre-IPO financial advisory project by studying related industries and comparable companies, meeting with client and lawyers, building restructuring plan and financial models, and coauthoring the final report
- Coordinated multiple projects simultaneously across teams, demonstrating work efficiency under pressure

### GAOTIME FINANCIAL INFORMATION CORPORATION

Shanghai, China

*Investment and Research Department, Research Assistant*

Jul.-Sep.2010

- Studied price discrepancies among split stock markets in China, particularly between A, B and H share markets
- Researched the impact of introducing index futures to the stock market and developed arbitrage strategies

## SKILLS AND ADDITIONAL EXPERIENCE

- Computer: SAS, Stata, EViews, MATLAB, R, SQL, C++, Excel VBA, Bloomberg, Capital IQ, and FactSet
- Pre-university: National prizes in both Mathematics and Physics Olympic Competitions in China (<<1% entrants)
- Leadership activities: President of Shanghai Jiao Tong University Student Quality Development Center, awarded SJTU excellent student leader; Team CFO in the "Challenge Cup" national college students business plan competition
- Interests: violin, badminton, volleyball, sailing, travelling and cooking