Yufei Gao

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EDUCATION

University of Illinois at Urbana-Champaign — Champaign, IL
Current student at Master of Science in Financial Engineering Program — 08.2017-12.2018
Beihang University (BUAA) — Beijing, China
Bachelor of Science: Hua Loo-Keng Mathematics Class (founded by BUAA and CAS) — 09.2013-06.2017
- **Major:** Mathematics and Applied Mathematics
- **GPA:** 90.0/100 (3.85/4.0, Top 10%); **Major GPA:** 3.89/4.0
- **Honors&Awards:**
  Excellency Prize of Hua Loo-Keng Talent Program in Mathematics (2017, Honored by CAS)
  Excellent Graduate of BUAA (2016, Top 15%)
  "Feng Ru Cup" Student Academic Scientific and Technological Works Competition (2016, Top 30% at BUAA)
  Mathematical Contest in Modeling (2015, Meritorious Winner, Top 9%)
  National Computer Rank Examination (2014, Grade 2, C programming language)

ACADEMIC EXPERIENCE

The Applications of Sparse Polynomial Equations in Natural Sciences — 06.2015-06.2017
Provided an efficient method to solve sparse nonlinear polynomial equation groups in order to apply in natural sciences
- Combined graph theory, matrix theory, Tarjan algorithms and Grobner basis theory
- Programmed in this project by using the software "Maple"
- Searched for cases of biological system from BioModels Data Base to test its effectiveness
- Graduation thesis: *Solving Sparse Polynomial Systems*

A Medicine Delivery System to Eradicate Ebola (Based on 2015 MCM Project) — 02.2015-05.2015
"Feng Ru Cup" Student Academic Scientific and Technological Works Competition
- Built a model for features of Ebola based on SEIRS model;
- Based on BP neutral network to predict the effective contacts rate
- Used Logistic growth model to describe the speed of manufacturing medicine and analyzed its rationality
- Transferred the delivery system into a NLP problem to find the local optimal solution

INTERNSHIP EXPERIENCE

National Bureau of Statistics — Suqian, China
Data Analyst Intern, Survey Office at Suqian City, Jiangsu Province — 09.2016-10.2016
- Read books to learn several statistical methods, such as Time Series Analysis, Regression Analysis
- Assisted to carry out a statistical research of surveying the consumer price index (CPI) at Suqian
- Did the collection of commodity prices in markets and audited the survey data and summarized the CPI data
- Learnt to use R and Excel to analyze the data; Wrote the final report

Huatai Securities Company Limited — Shanghai, China
Quantitative Analyst Intern, Financial Derivatives Department — 07.2016-08.2016
- Read the book "*Quantitative Investment*" written by Peng Ding and many other related SCI literatures; Knew the company's key businesses;
- Joined the project "Optimization and Analysis of the Stock Selection Strategy"; Made the trading strategy according to K-line patterns; Designed the quantitative stock selection strategy based on MACD indicator; Hedged the stock trading with futures; Wrote the final report
- Used Wind Financial Terminal to collect data; Programmed on MATLAB; Tested strategies with historical data
- Carried out the project "Stock Screening Based on Analysis of Industry Rankings" on my own

LEADERSHIP&ACTIVITIES

Genius Plan (Main Sponsor: JD Capital) — Beijing, China
Superintendent at BUAA — 08.2015-09.2015
- Propagated a new investment pattern in talents (college students) and planed activities in Beihang University
- Joined the summit meeting with delegates in other universities; learnt knowledge of financial investment

Beihang University Model United Nations Association — Beijing, China
Selected Member — 07.2013-06.2014
- Joined the Model United Nations Conference at University of International Relations
- Led a team to organize the 1st Model United Nations Conference in Changping District

Other activities: Beihang Mathematical Modeling Club; Beihang Math Tutoring Centre; Beihang Soccer Club

SKILL&INTERESTS

- Technical: C/C++, MATLAB, Maple, Python, Excel, R
- Interests: Basketball, Soccer, Tennis, Table Tennis, Badminton, Swimming