

# BINGNAN LIU

**Tel:** (+86) 156-5168-8289 **Email:** bingnliu@outlook.com

LinkedIn: linkedin.com/in/bingnliu GitHub: github.com/brillliantz

## **EDUCATION**

## Nanjing University, Kuang Yaming Honors School

Sep 2014 - Jun 2018.06

B.S. in Physics

- Cumulative GPA: 3.74/4.0 (Top 10%)
- Scholarships for Top-notch Talents (first class), two times; ZhengGang Scholarship (Top 3%)

### Harvard University, Graduate School of Arts & Science

Feb 2016

Harvard Apprentice Program

- I am one of the thirty students who pass the interview-screening process.
- LiaoYuan social network for startups [Cambridge Innovation Center]

## WORK EXPERIENCE AND ACADEMIC PROJECTS

WizardQuant

Jun 2016 - Sep 2016

Quantitative Researcher Summer Intern

- Did Feature Engineering on raw quote data (tick level) of 2.7 million length from Exchange, found 4 indicators of high frequency price movement through regression analysis
- Researched on kernel based support vector machine regression (sklearn) with data of 100 dimension and 800k length, gave meaningful explanations of parameters, beat the result of ridge regression
- Profiled the source code of critical functions to locate the bottleneck in order to accelerate the calculation of distance matrix

#### Citi Financial Innovation Application Competition

Jun 2016 - Nov 2016

Group Leader. 12th nationwide.

- Designed a robo-advisor platform, aiming to help investors allocate among major asset classes.
- Research on 4 asset classes and collect their meta-data. Use these meta-data to help build our database.
- Finish a complete Product Requirement Document of as a guidance of the entire software development.

## **University students Innovation Plan**

Nov 2015 - Dec 2016 (expected)

Pair Trading Strategy

- Find elite partners from 3 different majors and persuade them to join me.
- Together, read hundreds of websites and papers then write an literature review in just 1 week.
- Use python to build automatically trading strategies and do back test, with Tushare, vnpy, etc.

#### The Mathematical Contest in Modeling

Feb 2016

*Meritorious Winner (Top 8%)* 

- Use MATLAB to establish a differential model, then do nonlinear fitting with NASA's data.
- Use LaTeX to typeset our 30-page academic paper.

### **SKILLS**

- Coding: C++(OOP); Python (pandas, sklearn, seaborn, requests); Excel(VBA); LaTeX; MATLAB
- English: TOEFL (104); CET-6 (583); adept at searching and reading English papers

### LEADERSHIP AND VOLUNTEERING

#### **Director of Library Volunteer**

Oct 2014 - Jan 2015

• Coordinate with the librarian. Supervise a group of 16 to arrange more than 50k books.

#### **Executive Minister in NJU Student Union**

Oct 2014 - Nov 2015

- Receive over 30 honored guests and manage the distribution of 80 VIP tickets. [Top 10 Singers]
- Contact with 13 clubs to prepare before and after this 5k-people involved activity. [Cultural Night]