
Zhengtao(Josh) Cai

413 E Huron St, Apt 1311C, Ann Arbor, MI, 48104

Tel: (734) 846-2694

Email: caizh@umich.edu

EDUCATION

UNIVERSITY OF EXETER

Devon, UK

College of Engineering, Mathematics and Physical Sciences

2014.10-2017.06

- Bachelor of Science with honors in Mathematics Class I (equivalent to GPA 4.0)

UNIVERSITY OF MICHIGAN

MI

College of Literature, Science, and the Arts

2017.09-2018.12

- Master of Science in Quantitative Finance and Risk Management

Some Related Courses

Applied Mathematics Modules:

- The C family (C/C++), Advanced Statistical Modeling (R), Bayesian Statistics, Philosophy and Practice, Vector Calculus and Applications, Systems, Series and Transforms

Pure Mathematics Modules:

- Complex Analysis, Number Theory, Partial Differential Equations, Linear Algebra, Group, Rings and Fields, Probability and Discrete Mathematics, Advanced Calculus

RESEARCH EXPERIENCE

Predictability of quasi-biennial oscillation

Exeter, UK

2016.09-2017.01

- Studied the quasi-biennial oscillation (QBO) by looking into the “Quasi-Binomial generalized linear model (GLM)”, the “Gaussian Process (GP) model” and the “Delay-embedding model” based on data of 60 years.
- Independently developed the Delay-embedding model using R.
- Developed strong teamwork skills through making plans and decisions together and helping each other with the different models.
- Analyzed the effects of QBO in diverse industries, for example hedge fund and insurance, via referring to literatures and discussing with the industry experts; looked for scientific principles of the occurrence of QBO.
- Increased the abilities of gathering, processing and analyzing data as well as presentation.

INTERNSHIP EXPERIENCE

SHANGHAI SUNTIME INFORMATION TECHNOLOGY

Shanghai, China

Member of Product Researching & Developing Department

2016.07-2016.08

- Conducted research on Risk Parity Portfolio by reading related literature and explained the principle of the portfolio to colleagues.
- Gained composure to operational information for financial products.
- Assisted the supervisor to compile business reports.

SKILLS

-
- Experience in R, Matlab, C, C++ and Python