
Zhengtao Cai

413 E Huron St, Apt 1311C
Ann Arbor, MI, 48104
Tel: 7348462694
Email: caizh@umich.edu

EUDCATION

THE 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 (1 out of 1)

Some Related Courses

Applied Mathematics Modules:

The C family, Advanced Statistical Modeling, 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 Maths, Advanced Calculus

RESEARCH EXPERIENCE

Predictability of quasi-biennial Oscillation

2016.09-2017.01

- Developed strong teamwork skills through helping each other with the different models.
- Study the quasi-biennial oscillation (QBO) by trying the “Quasi-Binomial generalised linear model (GLM)”, the “Gaussian Process (GP) model” and finally the “Delay-embedding model” and comparing the models.
- Analyzed the effects of QBO in diverse industries 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.

INTERNSHIP EXPERIENCE

SHANGHAI SUNTIME INFORMATION TECHNOLOGY

2016.07-2016.08

Member of Product Researching & Developing Department

- Verified operational information for financial products, including fund managers' background, corporations' type and state of operation.
- Assisted the supervisor to compile business reports, and gained composure to how to analyze these data.
- Conducted research on Risk Parity Portfolio by reading related literature and explained the principle of the portfolio to colleagues.

SKILLS & INTEREST

Language skills: Native in Chinese; Fluent in English

Programming tools: R, Matlab, C, C++