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## **Zhengtao Cai**

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### **EDUCATION**

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#### **THE UNIVERSITY OF EXETER**

**Exeter, UK**

College of Engineering, Mathematics and Physical Sciences

**2014.10-2017.06**

#### **Bachelor of Science in Mathematics**

- CGPA: 3.7

#### **Courses**

The C family, Advanced Statistical Modeling, Statistical Inference, Bayesian Statistics, Philosophy and Practice.  
(and other pure Mathematics modules)

### **RESEARCH EXPERIENCE**

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#### **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.
- 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**

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#### **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, including fund managers' background, corporations' type and state of operation.
- Assisted the supervisor to compile business reports.

### **SKILLS**

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- Language skills: Native in Chinese; Fluent in English.
  - Experience in R, C, C++ and Python,
  - Work confidently in a team as well as independently.
  - Strong time management skills.