







# Fan Cheng

Curriculum Vitae  
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## Education and qualifications

2019–2023 Ph.D. in Statistics Monash University, Australia  
2016–2018 M. in Applied Statistics Central University of Finance and Economics, China  
2012–2016 B.Ec in Statistics Central University of Finance and Economics, China

## Employment history

2022.10– **Senior Research Officer**, NSW Bureau of Crime Statistics and Research, Department of Communities and Justice  
2020.07–2023.07 **Teaching Associate**, Department of Econometrics and Business Statistics, Monash University  
- ETC5523 Communicating with data, 2021S2 (Purple Letter for Outstanding Unit Evaluation of Teaching)  
- ETC5513 Collaborative and reproducible practices, 2021S1, 2022S1, 2023S1 (Purple Letter)  
- ETF3500/ETF5500 High Dimensional Data Analysis, 2020S2, 2021S2 (Purple Letter)  
2019.07– **Data Fluency Associate Instructor**, Library Research Division, Monash University Library  
- Monash Data Fluency workshops on R, Python, Git, Unix, HPC, etc.  
2020.07–2020.12 **Course Mentor**, Monash University Online Microcredential *Data Science: Data-Driven Decision Making*  
2018.07–2019.01 **Research Assistant**, School of Statistics and Mathematics, Central University of Finance and Economics

## Internship experience

2016.09–2017.09 **Big Data Analyst**, Shanghai Power Xene Digital Technology Company, Beijing, China  
2016.03–2016.04 **Research Assistant**, China Life Insurance Company Limited, Beijing, China  
2015.01–2015.02 **Consultant Assistant**, Industrial and Commercial Bank of China (ICBC), Hubei, China

## Research experience

2019.02– **Main Participant**, Monash Ph.D. project: Manifold Learning on Empirical Probability Distributions  
➤ Supervised by Prof. Rob J Hyndman and Associate Prof. Anastasios Panagiotelis.  
➤ Successfully completed the confirmation and the mid-candidature milestones.  
➤ Completed the main algorithm and finished all experiments using MonARCH HPC Cluster.  
➤ Submitted the working paper titled *Computationally Efficient Learning of Statistical Manifolds*.  
2018.07–2019.01 **Research Assistant**, National Natural Science Foundation of China  
➤ Assisted in the Efficient Bayesian Flexible Density Methods with High Dimensional Financial Data Project.  
➤ Completed the stochastic gradient descent application to the multivariate response surface.  
➤ Completed the paper titled *Volatility Analysis for Housing Prices with Bayesian Response Surface Optimization*.  
2013.04–2014.04 **Main Participant**, National Undergraduate Innovation and Entrepreneurship Training Program  
➤ Initiated a municipal project, made overall arrangements for the project, from research proposal, project fund application, plan of the theoretical approaches and empirical analysis of the questionnaire data.  
➤ Won the Excellent Prize upon the accomplishment of the research project.  
➤ Completed the paper titled *Feasibility Analysis for Developing Commercial Insurance for Losing Only-child Problem*.

## Honours and awards

2022 Graduate Research Completion Award (GRCA), Monash University  
2021 Runner-up for AMSI Winter School Participants Talk, Australian Mathematical Sciences Institute  
2021 ACEMS Business Analytics Prize for 2021, ARC Centre of Excellence for Mathematical & Statistical Frontiers  
2019 Monash Graduate Scholarship, Monash University, yearly from 2019 to 2022  
2019 Monash International Tuition Scholarship, Monash University, yearly from 2019 to 2022  
2018 Outstanding Postgraduate Student, Central University of Finance and Economics (CUFE)  
2017 First Prize Academic Scholarship for Graduate Student, CUFE  
2016 Outstanding Undergraduate Student, CUFE  
2016 Scholarship for All-Round Development, CUFE, yearly from 2013 to 2016  
2016 Scholarship for Excellent Academic Innovation, CUFE  
2015 Excellent Prize in National Undergraduate Statistical Contest in Modeling, Statistical Education Society of China  
2015 Second Prize in National Undergraduate Mathematical Contest in Modeling  
2015 National Endeavor Scholarship, Ministry of Education of Beijing  
2014 Scholarship for Excellent Student Cadre, CUFE  
2013 Excellent Student Cadre, School of Statistics and Mathematics, CUFE