

# Curriculum Vitae

Dr. Ruoxu Tan

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## EDUCATION

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- Ph.D. in statistical theory 2017.3 – 2021.6  
School of Mathematics and Statistics, the University of Melbourne, Melbourne, Australia.  
Thesis advisor: Prof. Aurore Delaigle.
- B.Sc. in mathematics and applied mathematics 2012.9 – 2016.7  
School of Mathematics, Jilin University, Changchun, China.

## RESEARCH EXPERIENCE

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- *Postdoctoral Fellow* 2021.8 – Present  
Department of Statistics and Actuarial Science, the University of Hong Kong, Hong Kong SAR, China.  
Host: Prof. Guosheng Yin.
- *Research Assistant* 2021.5 – 2021.8  
School of Mathematics and Statistics, the University of Melbourne, Melbourne, Australia.  
Host: Prof. Aurore Delaigle.

## RESEARCH INTERESTS

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- Causal inference, missing data analysis
- Functional data analysis
- Manifold data analysis, manifold learning

## TEACHING EXPERIENCE

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The University of Hong Kong:

- DASC7011: Statistical Inference for Data Science Semester 1, 2022
- STAT2601: Probability and Statistics I Semester 2, 2021
- STAT1602: Business Statistics Semester 1, 2021

The University of Melbourne:

- MAST20005: Statistics Semester 2, 2020
- MAST20006: Probability for Statistics Semester 1, 2020
- MAST20005: Statistics Semester 2, 2019
- MAST20006: Probability for Statistics Semester 1, 2019
- MAST20009: Vector Calculus Semester 2, 2018

## AWARDS AND CERTIFICATES

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- China Scholarship Council (CSC)–University of Melbourne Ph.D. Scholarship
- The Second National Prize of Contemporary Undergraduate Mathematical Contest in Modeling (CUMCM) 2013

## PRESENTATIONS

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- *Estimation of functional treatment effect using generalized empirical likelihood stabilized weights*, 5th International Conference on Econometrics and Statistics (EcoSta 2022), Kyoto, Japan.
- *Group testing regression analysis with missing data*, Young Statisticians Conference 2019, Canberra, Australia.

## PUBLICATIONS

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(\* denotes the corresponding author.)

- [6] Tan, R., Huang, W.\*, Zhang, Z. and Yin, G. (2022+). Causal effect of functional treatment. *Submitted*.
- [5] Tan, R.\* (2022+). Nonparametric regression with nonignorable missing covariates and outcomes using bounded inverse weighting. *Submitted*.
- [4] Delaigle, A. and Tan, R.\* (2023). Group testing regression analysis with covariates and specimens subject to missingness. *Statistics in Medicine*, **42**, 731–744.
- [3] Tan, R.\*, Zang, Y. and Yin, G. (2023+). Nonlinear dimension reduction for functional data with application to clustering. *Statistica Sinica*, to appear.
- [2] Delaigle, A. and Tan, R.\* (2023+). Group testing regression analysis with missing data and imperfect tests. *Statistica Sinica*, to appear.
- [1] Tan, R.\* (2021). Nonparametric techniques with missing data. *PhD Thesis*.