# Curriculum Vitae

Dr. Ruoxu Tan

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## EDUCATION

- Ph.D. in statistical theory 2017.3 – 2021.7
  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.

## EMPLOYMENT

- *Assistant Professor* 2023.9 – Present
  School of Mathematical Sciences, Tongji University, Shanghai, China.
- *Postdoctoral Fellow* 2021.8 – 2023.8
  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

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

## TEACHING EXPERIENCE

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

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

## PRESENTATIONS

- *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

(* *denotes the corresponding author.*)

[9] Tan, R.* and Zang, Y. (2024) Supervised manifold learning for functional data. *Submitted*.

[8] Gu, J., Tan, R.* and Yin, G. (2023). Delaunay weighted two-sample test for high-dimensional data by incorporating geometric information. *Submitted*.

[7] Tan, R.* and Yin, G. (2023). Model averaging for manifold learning. *Submitted*.

[6] Tan, R., Huang, W.*, Zhang, Z. and Yin, G. (2023). Causal effect of functional treatment. *Submitted*.

[5] Tan, R.*, Zang, Y. and Yin, G. (2024). Nonlinear dimension reduction for functional data with application to clustering. *Statistica Sinica*, **34**, 1391–1412.

[4] Delaigle, A. and Tan, R.* (2024). Group testing regression analysis with missing data and imperfect tests. *Statistica Sinica*, **34**, 201–228.

[3] Tan, R.* (2023). Nonparametric regression with nonignorable missing covariates and outcomes using bounded inverse weighting. *Journal of Nonparametric Statistics*. **35**, 927–946.

[2] Delaigle, A. and Tan, R.* (2023). Group testing regression analysis with covariates and specimens subject to missingness. *Statistics in Medicine*, **42**, 731–744.

[1] Tan, R.* (2021). Nonparametric techniques with missing data. *PhD Thesis*.