Curriculum Vitae

Dr. Ruoxu Tan

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EDUCATION

Ph.D. in statistical theory
School of Mathematics and Statistics, the University of Melbourne, Melbourne, Australia.
Thesis advisor: Prof. Aurore Delaigle.

• B.Sc. in mathematics and applied mathematics School of Mathematics, Jilin University, Changchun, China. 2012.9 - 2016.7

RESEARCH EXPERIENCE

• 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

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

TEACHING EXPERIENCE

| The University of Hong Kong: | |
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| • 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.)

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