H. Sherry Zhang

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Education

2020 - 23 PhD, Monash University

Thesis: New tools for visualising and explaining multivariate spatio-temporal data, supervised by Prof. Dianne Cook, Dr. Patricia Menéndez, Dr. Nicolas Langrené, and Dr. Ursula Laa.

2016 – 19 BComm(Hons.), Monash University

Bachelor of Commerce with honours, First Class Honours (H1)

Thesis: Exploration of judicial facial expression in videos of legal proceedings, supervised by Prof. Dianne Cook and Prof. Russell Smyth

Publications

- 1. **Zhang, H. S.**, Cook, D., Laa, U., Langrené, N., & Menéndez, P. (2021). Visual Diagnostics for Constrained Optimisation with Application to Guided Tours. The R Journal, 13(2), 624–641. https://doi.org/10.32614/RJ-2021-105
- 2. Lee, S., Cook, D., Silva, N. da, Laa, U., Spyrison, N., Wang, E., & **Zhang, H. S.** (2022). The state-of-the-art on tours for dynamic visualization of high-dimensional data. WIREs Computational Statistics, 14(4), e1573. https://doi.org/10.1002/wics.1573

Accepted:

3. Zhang, H. S., Cook, D., Laa, U., Langrené, N., & Menéndez, P. (2022). cubble: An R package for organizing and wrangling multivariate spatio-temporal data. Accepted by the Journal of Statistical Software. https://arxiv.org/abs/2205.00259

Submitted:

4. Zhang, H. S., Cook, D., Laa, U., Langrené, N., & Menéndez, P. (2023). A tidy framework and infrastructure to systematically assemble spatio-temporal indexes from multivariate data. Submitted to the Journal of Computational and Graphical Statistics. https://arxiv.org/abs/2401.05812

Talks

| Lain | | |
|----------------------|---|-------------------------|
| $\overline{Invited}$ | | |
| Dec 2023 | Computational and Methodological Statistics (CMStatistics 2023) | Berlin, Germany |
| Sep 2023 | Monash Research Tools Workshop | $Melbourne,\ Australia$ |
| Nov 2022 | CANSSI Ontario Statistical Software Conference | virtual |
| Contributed | | |
| Feb 2023 | The Australian Spatial Econometrics and Statistics Workshop | $Melbourne,\ Australia$ |
| Nov 2022 | Early Career and Student Statisticians Miniconference | virtual |
| | People's Choice Award | |
| Jun 2022 | UseR! 2022 | virtual |
| Jul 2021 | UseR! 2021 | virtual |
| Visiting talks | | |
| Jan 2024 | Humboldt University of Berlin, Faculty of Economics | Germany |
| May 2023 | University of Münster, Institute for Geoinformatics | Germany |
| Apr 2023 | Maynooth University, Department of Mathematics and Statistics | Ireland |
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Software

Main maintainer:

tidyindex A general data pipeline for computing indexes

cubble A data structure for organizing and wrangling spatio-temporal data, 52 stars on GitHub

ferrn Visual diagnostics plots for projection pursuit guided tour optimisation

Regular contributor:

rj Tools to help the (associate) editors with the reviewing process of the R journal

rjtools Tools for authors to write, check, and submit articles to the R Journal, 30 stars on GitHub

tourr Tour methods for multivariate data visualisation, 62 stars on GitHub

Teaching

TA for Monash coursework:

| 2020, 21 | ETC5512 Wild Caught Data |
|----------|-----------------------------------|
| 2020, 21 | ETC5521 Exploratory Data Analysis |

2019, 20 ETC1010/ETC5510 Introduction to Data Analysis

Instructor for workshops:

| Apr 2023 | Switching between | space and time: | Spatio-temporal | analysis with | cubble, R Ladies Vienna |
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Dec 2022 Wrangling spatio-temporal data with R, WOMBAT

Sep 2022 Switching between space and time: Spatio-temporal analysis with cubble, R Ladies Melbourne

Awards

| 2024 | John M. Chambers Statistical Software Award, American Statistical Association |
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| 2023 | Opportunity scholar, Posit::conf(2023) |
| 2022 | People's Choice Award, ECSS Miniconference, Statistical Society of Australia |
| 2020 - 23 | Postgraduate (PhD) Research Scholarship, CSIRO Data61 |
| 2020 - 23 | Co-Funded Graduate Research Scholarship, Monash Business School |
| 2020 | Dean's Honours List, Monash Business School |
| 2019 | Summer Vacation Research Scholarship, Monash University |
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Service

2022 Seminar organiser: Monash NUMBATs https://numbat.space/