H. Sherry Zhang

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Appointment

2024 – present	**University of Texas at Austin, Department of Statistics and Data Sciences** Postdoctoral Fellow working with Prof. Roger Peng

Education

2020 – 2023	**PhD in Statistics, 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 – 2019	**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

Awards

2025	Winner of the JSM Annual Data Challenge Expo
2024	John M. Chambers Statistical Software Award (ASA section of statistical computing), awarded for the R package cubble, which introduces a new data structure for spatio-temporal data and provides a ggplot2 extension for creating glyph maps.
2023	Opportunity scholar, Posit::conf(2023)
2022	People's Choice Award, ECSS Miniconference, Statistical Society of Australia
2020 - 2023	Postgraduate (PhD) Research Scholarship, CSIRO Data61
2020 - 2023	Co-Funded Graduate Research Scholarship, Monash Business School
2020	Dean's Honours List, Monash Business School
2019	Summer Vacation Research Scholarship, Monash University

Publications

1. **Zhang, H. S.**, Cook, D., Laa, U., Langrené, N., & Menéndez, P. (2025). A Tidy Framework and Infrastructure to Systematically Assemble Spatio-temporal Indexes from Multivariate Data. *Journal of Computational and Graphical Statistics*, 1-19. https://doi.org/10.1080/10618600.2024.2374960

2. **Zhang, H. S.**, Cook, D., Laa, U., Langrené, N., & Menéndez, P. (2024). cubble: An R package for organizing and wrangling multivariate spatio-temporal data. *Journal of Statistical Software*, *110*, 1-27. https://doi.org/10.18637/jss.v110.i07

3. 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

4. **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

Accepted:

5. **Zhang, H. S.**, Cook, D., Langrené, N., & Leung, J. W. Y. (2025). Squintability and Other Metrics for Assessing Projection Pursuit Indexes, and Guiding Optimization Choices. *Tentatively accepted to the Journal of Computational and Graphical Statistics.* https://arxiv.org/abs/2407.13663

6. **Zhang, H. S.**, Peng, R. D.(2025). Inside Out: Externalizing Assumptions in Data Analysis as Validation Checks. *Tentatively accepted in the Journal of Data Science pending on minor revision.* https://arxiv.org/abs/2501.04296

Submitted:

7. **Zhang, H. S.**, Peng, R. D.(2025). An LLM-based Pipeline for Understanding Decision Choices in Data Analysis from Published Literature. *Submitted to The ACM CHI conference on Human Factors in Computing Systems (CHI 2026).* https://github.com/huizezhang-sherry/paper-decisions

Software Activities

Package maintainer (primary author):

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

Package 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

Other activities:

2024	maintainer of CRAN task view: Dynamic Visualizations
2024	reviewer of ROpenSci software peer review
2024	reviewer of John M. Chambers Statistical Software Award 2025
2025	contributor to fix bug in base R on array max.print

Talks

2025 Jun	NYU-LMU-Workshop Making Data Work: Tools for Better Stats. Practice	*Munich, Germany*
2025 Aug	Joint Statistical Meeting (JSM)	*Nashville, USA*
2025 May	Symposium on Data Science and Statistics	*Salt Lake City, USA*
2024 Dec	University of Nebraska-Lincoln Graphic Group	*virtual*
2024 Oct	UT Austin SDS Department Seminar	*Austin, USA*
2024 Sep	Intl. Conf. on Trends & Perspectives in Linear Stats. Inference (LinStat 2024)	*Poprad, Slovakia*
2024 Aug	Computational Statistics (COMPSTAT 2024)	*Giessen, Germany*
2024 Aug	Joint Statistical Meeting (JSM)	*Portland, USA*
2024 Aug	John M. Chambers Statistical Software Award Talk	*Portland, USA*
2024 Jan	Humboldt University of Berlin, Faculty of Economics	*Germany*
2023 Dec	Computational and Methodological Statistics (CMStatistics 2023)	*Berlin, Germany*
2023 Sep	Monash Research Tools Workshop	*Melbourne, Australia*
2023 May	University of Münster, Institute for Geoinformatics	*Germany*
2023 Feb	The Australian Spatial Econometrics and Statistics Workshop	*Melbourne, Australia*
2023 Apr	Maynooth University, Department of Mathematics and Statistics	*Ireland*
2022 Nov	CANSSI Ontario Statistical Software Conference *invite*	*virtual*
2022 Nov	Early Career and Student Statisticians Miniconference	*virtual*
2022 Jun	UseR! 2022	*virtual*
2021 Jul	UseR! 2021	*virtual*

Teaching and Supervision

Instructor for UT Austin undergraduate coursework:

2025 Fall	SDS322E Elements of Data Sciences

Research supervision:

2024 summer	Co-supervisor for Google Summer of Code R Project: ribbon and segment glyph map
2024 summer	Co-supervisor first year PhD student summer research at University of Texas at Austin

TA for Monash undergraduate and graduate coursework:

2021, 2022	ETC5512 Wild Caught Data
2020, 2021	ETC5521 Exploratory Data Analysis
2019, 2020	ETC1010/ETC5510 Introduction to Data Analysis

Instructor for workshops:

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

Service

2025	Program Chair-Elect ASA Section of Statistical Graphics
2024 onwards	Reviewer for the R Journal, The Australian & New Zealand Journal of Statistics, ROpenSci
2024	John M. Chambers Statistical Software Award review panel
2022	Seminar organiser: Monash NUMBATs

Media Coverage

2023	Monash Graduate research impact: Crunching the numbers: How new research has revealed the hidden truth behind indexes

Referees

1. **Roger D. Peng**, Postdoc Supervisor, roger.peng@austin.utexas.edu, Professor of Statistics, Department of Statisticss and Data Sciences at University of Texas at Austin, Texas, USA

2. **Dianne H. Cook**, PhD Thesis Advisor, dicook@monash.edu, Professor of Statistics, Department of Econometrics and Business Statistics at Monash University, Australia

3. **Nicolas Langrené**, PhD Thesis Advisor, nicolaslangrene@uic.edu.cn, Associate Professor, UIC Financial Mathematics Programme, Beijing Normal-Hong Kong Baptist University, Zhuhai, Guangdong, China