

# YA-SHAN CHENG (鄭雅珊)

## CONTACT INFORMATION

Postdoctoral Research Fellow

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## EDUCATION

2021–2025	<b>Ph.D. in Statistics</b> , National Tsing Hua University
2007–2009	<b>M.S. in Statistics</b> , National Central University
2002–2006	<b>B.B.A. in Business Administration</b> , National Central University

## RESEARCH INTEREST

Reliability, Epidemiology and Medical Research

## JOURNAL PAPERS

1. Cheng, Y.-S., Chen, Y. and Lee, M.-L. T. (2025). Longitudinal Survival Analysis Using First Hitting Time Threshold Regression: With Applications to Wiener Processes. *Stats*, **8**, 32. <https://doi.org/10.3390/stats8020032>
2. Cheng, Y. S. and Peng, C. Y. (2024), Optimal Test Planning for Heterogeneous Wiener Processes. *Naval Research Logistics*, **71**, 509–520.
3. Peng, C. Y., Nagatsuka, H. and Cheng, Y. S. (2022), Optimal Test Planning for Heterogeneous Inverse Gaussian Processes. *Lifetime Data Analysis*, **28**, 401–427.
4. Peng, C. Y. and Cheng, Y. S. (2021), Profile Optimum Planning for Degradation Analysis. *Naval Research Logistics*, **68**, 951–962.
5. Peng, C. Y. and Cheng, Y. S. (2020), Student-*t* Processes for Degradation Analysis. *Technometrics*, **62**, 223–235.
6. Cheng, Y. S. and Peng, C. Y. (2012), Integrated Degradation Models in R Using iDEMO. *Journal of Statistical Software*, **49**, 1–22.

## BOOK CHAPTERS

1. Peng, C. Y. and Cheng, Y. S. (2016), Threshold Degradation in R Using iDEMO in *Computational Network Analysis with R: Applications in Biology, Medicine and Chemistry* (Dehmer, M., Shi, Y. and Emmert-Streib, F., eds.), Weinheim: Wiley-VCH Verlag GmbH & Co. KGaA, 83–124.

## **RESEARCH TOOLS DEVELOPED**

1. **R PACKAGE:** iDEMO\_0.4-5
2. **GitHub:** <https://github.com/yscheng33/LTR-Wiener>