

Linh H. Nghiem

🌐 linhnghiem.org ✉ linh.nghiem@sydney.edu.au 🐙 github.com/lnghiemum

ACADEMIC EXPERIENCE

University of Sydney

Lecturer in Statistics (equivalent to an Assistant Professor)

NSW, Australia

2022–

Australian National University

Postdoctoral Research Fellow

ACT, Australia

2019–2022

EDUCATION

Southern Methodist University

Ph.D. in Statistical Science

Texas, USA

2015–2019

University of Miami

Bachelor of Science in Finance and Mathematics, *summa cum laude*

Florida, USA

2011–2015

RESEARCH INTERESTS

Measurement error, dimension reduction, privacy, graphical model, longitudinal data

PUBLICATIONS

Book Chapter

1. **Nghiem, L.**, Tabak, B., Wallmark, Z., Alvi, T. & Cao, J. (2022). A Bayesian Latent Variable Model for Analysis of Empathic Accuracy. In: Ng, H.K.T., Heitjan, D.F. (eds) *Recent Advances on Sampling Methods and Educational Statistics. Emerging Topics in Statistics and Biostatistics*. Springer, Cham. https://doi.org/10.1007/978-3-031-14525-4_10

Journal Articles

1. **Nghiem, L.**, & Hui, F.K.C. (2023+). Random effect sufficient dimension reduction for clustered data. *Submitted*.
2. **Nghiem, L.**, A. Ding & S. Wu (2023+). Statistical analyses for differentially-private matrix masking data. *Submitted*.
3. **Nghiem, L.**, Hui, F.K.C., Müller, S., Welsh, A.H. (2023+). Likelihood-based surrogate dimension reduction, to appear in *Statistics and Computing*.
4. **Nghiem, L.**, & Potgieter, C. (2023+). A linear errors-in-variables model with unknown heteroscedastic measurement errors, *Statistica Sinica*. Advanced online publication.
5. Tabak, B. A., Wallmark, Z., **Nghiem, L.**, Alvi, T., Sunahara, C. S., Lee, J., & Cao, J. (2023). Initial evidence for a relation between behaviorally assessed empathic accuracy and affect sharing for people and music. *Emotion*, 23(2) 437-449.
6. **Nghiem, L.**, Hui, F.K.C, Müller, S., Welsh, A.H. (2023). Screening methods for linear errors-in-variables regression models in high dimensions. *Biometrics*, 79, 926–939.

7. **Nghiem, L.**, Hui, F.K.C., Müller, S., Welsh, A.H. (2022). Estimation of graphical models for skew continuous data. *Scandinavian Journal of Statistics*, 49, 1811–1841.
8. Hui, F.K.C., **Nghiem, L.** (2022). Sufficient dimension reduction for clustered data via finite mixture modeling. *Australian and New Zealand Journal of Statistics*, 64, 133-157.
9. **Nghiem, L.**, Hui, F.K.C., Müller, S., Welsh, A.H. (2022). Sparse sliced inverse regression via Cholesky matrix penalization, *Statistica Sinica* 32, 2431-2453.
10. Wallmark, Z, **Nghiem, L.**, & Marks, L.E. (2021). Do ‘bright’ sounds modulate visual brightness discrimination? Exploring cross-modal interference involving timbre. *Music Perception: An Interdisciplinary Journal*, 39, 1–20.
11. Byrd, M., **Nghiem, L.**, & Mcgee, M. (2021). Bayesian regularization of Gaussian graphical models with measurement error. *Computational Statistics and Data Analysis* 156, 107085.
12. **Nghiem, L.**, Potgieter, C., & Byrd, M. (2020). Estimation in linear errors-in-variables with unknown error distribution. *Biometrika* 107, 841-856.
13. **Nghiem, L.**, & Potgieter, C. (2019). Simulation-Selection-Extrapolation: Estimation in high dimensional errors-in-variables models. *Biometrics* 75, 1133–1144.
14. Wallmark, Z., Frank, R., & **Nghiem, L.** (2019). Creating novel timbres from Adjectives: An exploratory study using FM Synthesis. *Psychomusicology: Music, Mind, and Brain* 29, 188–199.
15. **Nghiem, L.**, & Potgieter, C. (2018). Density estimation in the presence of heteroscedastic measurement error of unknown type using phase function deconvolution. *Statistics in Medicine* 37, 3679–3692.
16. **Nghiem, L.** (2016). "A heuristic method for scheduling band concert tours," *SIAM Undergraduate Research Online (SIURO)*.

INVITED TALKS

1. Institute of Mathematical Statistics Asia Pacific-Rim Meeting, Melbourne, January 2024.
2. Joint Statistical Meeting, Toronto, Ontario, August 2023.
3. International Chinese Statistical Association’s Meeting, Chengdu, July 2023.
4. Statistical Society of Australia’s Canberra branch, May 2023.
5. School of Mathematics and Statistics, University of New South Wales, April 2023.
6. Department of Biostatistics, University of Florida, September 2021.
7. Melbourne Business School, September 2021.
8. Department of Mathematics and Statistics, Macquarie University, August 2021.
9. School of Mathematics and Statistics, University of Sydney, August 2021.
10. Department of Business and Econometrics, Monash University, June 2021.
11. Department of Statistics Seminar, University of New South Wales, Sydney, Australia. June 2020.
12. Statistical Methods in Data Science, MATRIX workshop, Victoria, Australia. December 2019.

13. Research School of Finance, Actuarial Studies and Statistics, Australian National University, Australian Capital Territory, Australia. October 2019.
14. Regional Meeting of the International Environmetrics Society, Kunming, Yunnan, China. August 2019.
15. Department of Mathematics and Statistics Seminar, University of Sydney, New South Wales, Australia. April 2019.
16. National Institute for Applied Statistics Research Australia Meeting, Goulburn, Australia. April 2019.
17. Department of Statistical Science Seminar, Southern Methodist University, October 2018.

CONTRIBUTED PRESENTATIONS

1. Australia Statistical Meeting, Wollongong, NSW Australia. December 2023.
2. International Biometric Society Australian Region Conference, Adelaide, South Australia, Australia. December 2019.
3. Joint Statistical Meeting. Vancouver, British Columbia, Canada. August 2018.
4. Joint Statistical Meeting. Baltimore, Maryland, USA. August 2017.
5. WNAR Student Paper Competition. Santa Fe, New Mexico, USA. June 2017.

GRANTS AND FUNDING

- “An fMRI investigation of empathic accuracy for people and music.” *GRAMMY Museum Grant Program*. Co-investigator with Wallmark, Z., Tabak, B., Cao, J. and Kahn, L. (\$US20,000).
- Travel grant, Faculty of Science Overseas Conference and Research Visit Support Program 2023 (\$5,000)

TEACHING

1. Lecturer and Unit Coordinator

- MATH1905 Statistical Thinking with Data (Advanced), University of Sydney. Semester 2, 2023.
- STAT3022/3922/4022 Applied Linear Models (Regular and Advanced), University of Sydney. Semester 1, 2022, 2023.
- STAT3023 Statistical Inference, University of Sydney. Semester 2, 2022.
- STAT7055 Introductory Statistics for Business and Finance, Australian National University, Spring 2021 (intensive course).
- STAT6038 Regression Modeling, Australian National University, Autumn 2020, 2021 (intensive course).

2. Teaching Assistant

- STAT2331 Introduction to Statistical Methods, Southern Methodist University. Fall 2016, Spring 2017.
- STAT2301 Business Statistics, Southern Methodist University. Fall 2015, Spring 2016.

SUPERVISION

1. Nia Chen 2023–
PhD in Statistics associate supervisor, School of Mathematics and Statistics, University of Sydney
2. Wei Li 2020–
PhD in Statistics panel member, Research School of Finance, Actuarial Studies and Statistics, Australian National University.
3. Tianyi Wang 2023–
Master of Mathematical Sciences supervisor, School of Mathematics and Statistics, University of Sydney
4. Zuocheng Dai 2023–
Honours in Data Science supervisor, School of Mathematics and Statistics, University of Sydney
5. Max Woolward 2023
Honours in Data Science co-supervisor, School of Mathematics and Statistics, University of Sydney
6. Xiaoyue Wen 2022–2023
Master of Mathematical Sciences supervisor, School of Mathematics and Statistics, University of Sydney
7. Lucinda Davies 2022–2023
Honours in Data Science, School of Mathematics and Statistics, University of Sydney

PROFESSIONAL ACTIVITIES

- Membership: American Statistical Association, Statistical Society of Australia (SSA)
- Referees: National Science Foundation, Biostatistics, Biometrics, Journal of American Statistical Association, Journal of Computational and Graphical Statistics, Brazilian Journal of Probability and Statistics, Computational Statistics, Journal of Nonparametric Statistics
- Services: Statistics seminar organizer (2022–2023), Program Chair of the Australian Early Career and Student Statistician Conference 2021, Council member of SSA Canberra branch (2021) and NSW branch (2022-present)

AWARDS

- SMU Department of Statistical Science Walsh Award for the Best Paper in the Qualifying Examination 2018
- The Western North American Region of the International Biometrics Society Distinguished Oral Paper Award 2017
- SMU Department of Statistical Science Milton Award for the Best Performance in first year courses 2016

SOFTWARE

R, MATLAB, Python, Java, C