

WAYNE YU WANG

Department of Statistics, University of Michigan
323 West Hall
1085 South University
Ann Arbor, MI 48109

tel: 734.277.5499
web: me.com
twitter: @wayneywang
email: wayneyw@umich.edu

Education

2023 (expected)	Statistics, University of Michigan	Ph.D.
2018	Statistics, University of British Columbia	M.Sc.
2016	Actuarial Science, Simon Fraser University	B.Sc.

Research Interests

High-dimensional inference; Graphical models; (approximate) Bayesian inference; Generative models for spatio-temporal processes; Applications in natural sciences

Publications

- Wang, Y., Jang, B., & Hero, A. (2020). “The sylvester graphical lasso (syglasso).” *Proceedings of the Twenty Third International Conference on Artificial Intelligence and Statistics*, 108, 1943–1953.
- Wang, Y., Le, N. D., & Zidek, J. V. (2020). “Approximately optimal spatial design: How good is it?” *Spatial Statistics*, 100409.
- Casquilho-Resende, C., Le, N., Zidek, J., & Wang, Y. (2018). “Design of monitoring networks using k-determinantal point processes.” *Environmetrics*, 29(1), e2483.

Submitted Papers

- Wang, Y., & Hero, A. (2020). “A proximal alternating linearized minimization method for tensor graphical models.”
- Wang, Y., Hougen, C., Oselio, B., Dempsey, W., & Hero, A. (2020). “A geometry-driven longitudinal topic model.”
- Wang, Y., Le, N. D., & Zidek, J. V. (2019). “Approximately optimal subset selection for statistical design and modelling.” *arXiv:1709.00151v3 [stat.CO]*.

Presentations

Contributed conference presentations

- Wang, Y. (2020). “Sylvester graphical models for complex spatio-temporal processes.” *Presentation at the fourth annual review for the ARO-MURI: Adaptive Exploitation of Non-Commutative Multimodal Information Structure, Ann Arbor, MI*.
- Wang, Y. (2020). “The sylvester graphical lasso (syglasso).” *Conference proceedings talk at the 2020 Joint Statistical Meetings (JSM), Philadelphia, PA*.
- Wang, Y. (2020). “The sylvester graphical lasso (syglasso).” *Conference proceedings talk at the AISTATS 2020, Palermo, Italy*.

Invited presentations

Wang, Y. (2020). “A scalable tool for longitudinal twitter analysis: Understanding the impact of covid-19 on public discourse.” *Invited seminar talk in COVID-19 Data Science Research Special Webinar Series at the Michigan Institute for Data Science, Ann Arbor, MI.*

Teaching

Teaching Assistant

University of Michigan | Department of Statistics

- | | |
|------|--|
| 2020 | STATS 551: <i>Bayesian Modelling and Computation</i>
<i>Description:</i> Graduate-level introduction to Bayesian inference.
<i>Course materials:</i> ywa136.github.io/teaching/stats551_2020Winter |
| 2019 | STATS 306: <i>Introduction to Statistical Computing</i>
<i>Description:</i> Senior undergraduate-level introductory statistical computing course based on the R programming language.
<i>Course materials:</i> https://ywa136.github.io/teaching/stats306_2019Fall |
| 2019 | STATS 426: <i>Introduction to Theoretical Statistics</i>
<i>Description:</i> Senior undergraduate-level introduction to theoretical statistics. |
| 2018 | STATS 250: <i>Introduction to Statistics and Data Analysis</i>
<i>Description:</i> Junior undergraduate-level course in applied statistical methodology for data analysis. |

University of British Columbia | Department of Statistics

- | | |
|------|---|
| 2017 | STATS 251: <i>Introductory Probability and Statistics</i> |
| 2016 | STATS 200: <i>Elementary Statistics for Applications</i> |

Awards, Fellowships, and Honors

- | | |
|-------------|--|
| 2018 - 2019 | Department of Statistics Fellowship, UMich |
| 2018 | International Doctoral Fellowship, UBC. (Declined; Five year \$35,000 per year fellowship awarded to the top 15 admitted international doctoral students across the university.) |
| 2017 | Travel Award for CBMS Regional Conference on Spatial Statistics. |
| 2016 | Statistics & Actuarial Science Endowment Award: Academic Merit, SFU. (Awarded to undergraduate student with the best academic performance across the department in the academic year.) |
| 2015 | VP Research - Undergraduate Student Research Award, SFU. (Awarded for the research project “Robust program for automated statistical imputation of the Alzheimer’s Disease Neuroimaging Initiative (ADNI) data”.) |
| 2014 | April Allen Memorial Undergraduate Scholarship, SFU. |
| 2014 | President’s Honour List, SFU. |
| 2013 - 2016 | Dean’s Honour List, SFU. |

Services

Reviewer for AISTATS 2021