

# WAYNE YU WANG

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## 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), In *Proceedings of the twenty third international conference on artificial intelligence and statistics*, PMLR. <http://proceedings.mlr.press/v108/wang20d.html>
- Wang, Y., Le, N. D., & Zidek, J. V. (2020). “Approximately optimal spatial design: How good is it?” *Spatial Statistics*, 100409. <https://www.sciencedirect.com/science/article/pii/S2211675320300038>
- Casquilho-Resende, C., Le, N., Zidek, J., & Wang, Y. (2018). “Design of monitoring networks using k-determinantal point processes”. *Environmetrics*, 29(1), e2483. <https://onlinelibrary.wiley.com/doi/full/10.1002/env.2483>

## 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]*. <https://arxiv.org/abs/1709.00151>

## Presentations

### Contributed presentations

- Wang, Y. (2020). Sylvester graphical models for complex spatio-temporal processes, In *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), In *Conference proceedings talk at the 2020 joint statistical meetings (jsm), philadelphia, pa.*

Wang, Y. (2020). The sylvester graphical lasso (syglasso), In *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, In *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> <a href="https://ywa136.github.io/teaching/stats551_2020Winter">ywa136.github.io/teaching/stats551_2020Winter</a>
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> <a href="https://ywa136.github.io/teaching/stats306_2019Fall">https://ywa136.github.io/teaching/stats306_2019Fall</a>
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; <b>Five year \$35,000 per year fellowship awarded to the top 15 admitted international doctoral students across the university.</b> )
2017	Travel Award for CBMS Regional Conference on Spatial Statistics.
2016	Statistics & Actuarial Science Endowment Award: Academic Merit, SFU. ( <b>Awarded to undergraduate student with the best academic performance across the department in the academic year.</b> )
2015	VP Research - Undergraduate Student Research Award, SFU. ( <b>Awarded for the research project “Robust program for automated statistical imputation of the Alzheimer’s Disease Neuroimaging Initiative (ADNI) data”.</b> )
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