

Haixu Wang

CONTACT INFORMATION	Address: MS448, 612 Campus Pl NW Calgary, AB, T2N 4V8 Github: github.com/alex-haixuw Website: haixu-alex.me	Email: haixu.wang@ucalgary.ca
RESEARCH INTERESTS	Functional data analysis, Biostatistics, Machine learning, Network analysis, Computational neuroscience, Data science, Bayesian analysis.	
EDUCATION	<p>Simon Fraser University, Burnaby, B.C., Canada</p> <p>Ph.D., Statistics, 2017–2023 (Parental leave: 2019–2021)</p> <ul style="list-style-type: none">• Thesis: <i>Machine Learning in Functional Data Analysis</i>• Supervisor: Dr. Jiguo Cao <p>Simon Fraser University, Burnaby, B.C., Canada</p> <p>M.S., Statistics, 2015–2017</p> <ul style="list-style-type: none">• Thesis: <i>Modeling Neural Spike Trains with Particle Markov Chain Monte Carlo and Smoothing</i>• Supervisor: Dr. Jiguo Cao and Dr. Michelle Zhou <p>Simon Fraser University, Burnaby, B.C., Canada</p> <p>B.S., Statistics, August, 2015</p>	
PUBLICATION	<ul style="list-style-type: none">• Wang, Haixu and Cao, Jiguo, 2024, “Functional Nonlinear Learning”, <i>Journal of Computational and Graphical Statistics</i>, 33, 181–191.• Wang, Haixu and Cao, Jiguo, 2023, “Nonlinear Prediction of Functional Time Series”, <i>Environmetrics</i>, 34(5), e2792.• Wang, Haixu and Cao, Jiguo, 2023, “pCODE: Estimating Parameters of ODE Models”, <i>The R Journal</i>, 14(4), 291–304.• Wang, Haixu and Cao, Jiguo, 2021, “Functional Principal Component Analysis for Multiple Variables on Different Riemannian Manifolds”, under invited revision for <i>Journal of Agricultural, Biological and Environmental Statistics</i>.• Wang, Haixu and Cao, Jiguo, 2020, “Estimating Time-varying Directed Neural Networks”, <i>Statistics and Computing</i>, 20, 1209–1220.• Ithurbide, M., Wang, H., Fassier, T., Li, Z., Pires, J., Larsen, T., Cao, J., Rupp, R., and Friggens, N., 2023, “Multivariate analysis of milk metabolite measures shows potential for deriving new resilience phenotypes”, <i>Journal of Dairy Science</i>, 106(11), 8072–8076.	
SOFTWARE	<ul style="list-style-type: none">• Wang, Haixu and Cao, Jiguo, 2020, “pCODE: a R package for estimating ODE models” available on CRAN, GITHUB, and Rshiny.	

INVITED
CONFERENCE
TALKS AND
PRESENTATIONS

- Wang, Haixu and Cao, Jiguo, “Functional Nonlinear Learning”, International Workshop on Complex Functional Data Analysis, Shanghai, China, 2022.
- Wang, Haixu and Cao, Jiguo, “Functional Nonlinear Learning”, Annual Meeting of the Statistical Society of Canada, Online, 2022.
- Wang, Haixu and Cao, Jiguo, “Functional Nonlinear Learning”, Canada Statistical Science Institute showcase, Online, 2021.
- Wang, Haixu and Cao, Jiguo, “Estimating time-varying directed neural networks”, International Chinese Statistical Association conference, Tianjin, China, 2019.

TEACHING

- *Simon Fraser University: Teaching Assistant 2017-2022*
 - Statistics Workshop.
 - STAT 100: Chance and Data Analysis
 - STAT 201: Statistics for the Life Sciences
 - STAT 203: Introduction to Statistics for the Social Sciences
 - STAT 270: Introduction to Probability and Statistics
 - STAT 305: Introduction to Biostatistical Methods for Health Sciences
 - STAT 485: Applied Time Series Analysis
- *Tianjin University: 2021 Summer*
 - Course on functional data analysis and parameter estimation of differential equations.

EMPLOYMENT

- **Assistant Professor**, *University of Calgary*, 2023-Current.
- **Graduate Teaching Assistant**, *Simon Fraser University*, 2017-2023.
- **Graduate Research Assistant**, *Simon Fraser University*, 2017-2023.
- **Data Scientist Intern**, *Pacific Blue Cross*, Burnaby, B.C., Canada. 2017–2018

AWARDS

- Randy Sitter Award, 2023
- PhD Graduate Fellowship, Simon Fraser University, 2017-2022