# Haixu Wang

Information

CONTACT Add

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RESEARCH INTERESTS

Functional data analysis, Neural networks, Network analysis, Bayesian analysis, Machine learning, Computational neuroscience, Data science.

EDUCATION

Simon Fraser University, Burnaby, B.C., Canada

Ph.D. Candidate, Statistics, 2017–2022 (Expected graduation)

• Supervisor: Dr. Jiguo Cao

Simon Fraser University, Burnaby, B.C., Canada

M.S., Statistics, 2015–2017

• Thesis: Modeling Neural Spike Trains with Particle Markov Chain Monte Carlo and Smoothing

• Supervisor: Dr. Jiguo Cao and Dr. Michelle Zhou

Simon Fraser University, Burnaby, B.C., Canada

B.S., Statistics, Aug. 2015

#### Publication

- Wang, H. and Cao, J., 2022, "Nonlinear Prediction for Functional Time Series", submitted to *Environmetrics*.
- Wang, H. and Cao, J., 2022, "pCODE: Estimating Parameters of ODE Models", submitted to *The R Journal*.
- Wang, H. and Cao, J., 2021, "Functional Nonlinear Learning", in revision for <del>Statistics Sinica.</del>
- Wang, H. and Cao, J., 2021, "Functional Principal Component Analysis for Multiple Variables on Different Riemannian Manifolds", in revision for *Statistics and Computing*.
- Wang, H. and Cao, J., 2020, "Dynamic Network Embedding: an Interpolation Approach", submitted to *Knowledge Discovery and Data Mining 2020 conference*.
- Wang, H. and Cao, J., 2020, "Estimating Time-varying Directed Neural Networks", Statistics and Computing, 20, 1209–1220.

### Project

• Wang, H. and Cao, J., 2020, "pCODE: a R package for estimating ODE models" available on CRAN, GITHUB, and Rshiny.

INVITED
CONFERENCE
TALKS AND
PRESENTATIONS

- Wang, H. and Cao, J., "Functional Nonlinear Learning", 2021 Canada Statistical Science Institute showcase, Online, 2021.
- Wang, H. and Cao, J., "Estimating time-varying directed neural networks", 2019 International Chinese Statistical Association conference, Tianjin, China, 2019.

#### Teaching

- Simon Fraser University: Teaching Assistant
  - 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

## EMPLOYMENT

- Graduate Teaching Assistant, Simon Fraser University, 2017-Current.
- Graduate Research Assistant, Simon Fraser University, 2017-Current.
- Data Scientist, Pacific Blue Cross, Burnaby, B.C., Canada. 2017–2018

#### AWARDS

- PhD Graduate Fellowship, Simon Fraser University, 2021-2022
- PhD Graduate Fellowship, Simon Fraser University, 2020-2021
- PhD Graduate Fellowship, Simon Fraser University, 2019-2010
- Graduate and Postdoctoral Fellowship, Simon Fraser University, 2019-2020
- PhD Graduate Fellowship, Simon Fraser University, 2018-2019
- PhD Graduate Fellowship, Simon Fraser University, 2017-2018