Huixia (Judy) Wang

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EDUCATION

- 2006, Ph.D., Statistics, University of Illinois at Urbana-Champaign, USA
- 2002, M.S., Statistics, Fudan University, Shanghai, China
- 1999, B.S., Statistics, Fudan University, Shanghai, China

RESEARCH INTERESTS

Bioinformatics and biostatistics; change point; extreme value theory and applications; high dimensional inference; longitudinal data analysis; measurement error; missing data analysis; quantile regression; semiparametric regression; spatial analysis; statistical learning; subgroup analysis; survival analysis

PROFESSIONAL EXPERIENCE

- 09/2022-present, Department Chair, Department of Statistics, George Washington University (GWU), Washington, DC
- 09/2017-present, Professor, Department of Statistics, GWU, Washington, DC
- 2023-present, Affiliated Faculty, Institute for Integrating Statistics in Decision Sciences, GWU, Washington, DC
- 2023-present, Faculty Board Member, Cyber Security and Privacy Research Institute, GWU, Washington, DC
- 09/2018-08/2022, Program Director, Division of Mathematical Sciences, National Science Foundation. Programs managed: Statistics; DMS-NIGMS; MSPRF; Math Institutes; Transdisciplinary Research In Principles Of Data Science (TRIPODS); Mathematical and Scientific Foundations of Deep Learning (MoDL); Harnessing Data Resolution (HDR); AI Institutes; SCALE MoDL; Smart Health and Biomedical Research in the Era of Artificial Intelligence and Advanced Data Science (SCH), Multimodal Sensor Systems for Precision Health Enabled by Data Harnessing, Artificial Intelligence, and Learning (SenSE); Algorithms for Threat Detection (ATD); Alorithms for Modern Power Systems (AMPS);
- 08/2014-08/2017, Associate Professor, Department of Statistics, George Washington University (GWU), Washington, DC
- 08/2012-07/2014, Associate Professor, Department of Statistics, North Carolina State University (NCSU), Raleigh, NC
- 01/2014-07/2014, Member of CHHE (Center for Human Health and the Environment), NCSU, Raleigh, NC
- 01/2013-07/2013, Visiting Associate Professor, Department of Biostatistics, Columbia University, New York, NY
- 08/2006-07/2012, Assistant Professor, Department of Statistics, NCSU, Raleigh, NC
- 08/2012-07/2013, Faculty Fellow, Statistical and Applied Mathematical Sciences Institute (SAMSI), Durham, NC
- 05/2008-07/2014, Faculty, Genomics Science Graduate Program, NCSU, Raleigh, NC

- 05/2005-08/2005, Summer Intern, Integrative Biology, Global Discovery & Development Statistics, Eli Lilly & Company, Indianapolis, IN
- 01/2003-12/2004, Statistical Consultant, W.M. Keck Center for Comparative and Functional Genomics, and Illinois Statistics Office, University of Illinois at Urbana-Champaign, IL

AWARDS AND HONORS

- Mitchell Distinguished Lecturer, University of Glasgow (2023)
- Medallion Lecturer, Intitute of Mathematical Statistics (2022)
- Elected member, International Statistical Institute (2020)
- Fellow of the American Statistical Association (2018)
- Fellow of the Institute of Mathematical Statistics (2018)
- National Science Foundation CAREER award (2012)
- Tweedie New Researcher Award from Institute of Mathematical Statistics (2012)
- Young Researcher Travel Award, Far Eastern and South Asian Meeting of the Econometric Society, Singapore (July 2008)
- J.P. Hsu Award for Excellent Research, International Chinese Statistical Association (June 2006)

GRANTS & PROPOSALS

- (Pending) National Science Foundation, Collaborative Research: FRGMS: Empowering Climate Science through Effective Tail Learning Methodology and Theory, Principal Investigator
- (Pending) National Institute of Health, "Antigen-Specific Immunosuppression of Myasthenia Gravis by CAR-Engineered Tregs," Co-Investigator
- (Under Prepration) National Science Foundation, "CDS&E: Collaborative Research: Unlocking Complex Heterogeneity in Large-Scale Spatial-Temporal Data with Adaptive Quantile Learning," Principal Investigator
- (Under Prepration) National Science Foundation, "SaTC:EDU: Integrating Cybersecurity into Mathematical and Statistical Curricula," Co-Principal Investigator
- 09/2017-08/2022, National Science Foundation Grant DMS-1712760 "Inference for High Dimensional Quantile Regression," Principal Investigator
- 04/2016-03/2019, KAUST OSR-2015-CRG4-2582 "Statistical Process Monitoring and Risk Assessment for Engineering and Spatial Environmental Applications," Co-Investigator
- 09/2015-06/2016, GWU CCAS (Columbian College of Arts & Sciences) Dean's Interdisciplinary Collaboration Excellence Award on "Characterization of Social Signals in Components of Ultrasonic Vocalizations in Laboratory Mice," Co-Investigator
- 09/2012-08/2017, National Science Foundation Grant DMS-1149355 (DMS-1525692) "CAREER: A New and Pragmatic Framework for Modeling and Predicting Conditional Quantiles in Data-sparse Regions," Principal Investigator
- 08/2012-07/2013, National Science Foundation Grant DMS-1216197 "2012 International Conference on Robust Statistics (ICORS2012)," Principal Investigator
- 09/2010-08/2013, National Science Foundation Grant DMS-1007420, "Analysis of Incomplete Data in Quantile Regression and Semiparametric Models," Principal Investigator
- 09/2009-08/2011, National Science Foundation US-China Collaboration in Mathematical Research, "Semiparametric Quantile Regression for Longitudinal Data," Principal Investigator

- 09/2007-08/2010, National Science Foundation Grant DMS-0706963, "Collaborative Research: Nonparametric Methods for Emerging Technologies in Bioinformatics," Principal Investigator
- 07/2007-06/2008, NCSU Faculty Research and Professional Development Award, "A Nonparametric Method for the Detection of Alternative Splicing with Exon Tiling Array Data," Principal Investigator

TEACHING

- STAT6201, Mathematical Statistics I, George Washington University (GWU) (Fall 2017, Fall 2023)
- STAT6289, Statistical Consulting, GWU (Spring 2018)
- Short course, Quantile Regression, GWU (07/2017, 07/2018)
- STAT6227, Survival Analysis, GWU (Spring 2017)
- STAT6210, Data Analysis, GWU (Spring 2015)
- STAT6215, Applied Multivariate Data Analysis, GWU (Spring 2015, Fall 2015, Spring 2016)
- STAT4157, Introduction to Mathematical Statistics I, GWU (Fall 2014)
- Short course, A Gentle Introduction to Quantile Regression, Joint Statistical Meetings (August 02, 2014, jointly taught with Roger Koenker)
- ST522, Statistical Theory II, North Carolina State University (NCSU) (Spring 2013)
- ST521, Statistical Theory I, NCSU (Fall 2011, 2012)
- ST505, Applied Nonparametric Statistics, NCSU (Spring 2011, 2012)
- ST422, Introduction to Mathematical Statistics II, NCSU (Spring 2010, 2011)
- ST421, Introduction to Mathematical Statistics I, NCSU (Fall 2009, 2010, 2012)
- ST790, Introduction to Quantile Regression, NCSU (Spring 2009)
- ST372, Introduction to Statistical Inference Regression, NCSU (Fall 2006-2009)
- STAT400, Introduction to Mathematical Statistics (lab instructor), University of Illinois at Urbana-Champaign (UIUC) (Fall 2002-2004)
- Short course, Microarray Data Analysis (Statistical Analysis for Microarray Data in R and dChip), UIUC (05/2003 and 06/2004)

UNDERGRADUATE RESEARCH SUPERVISION

- Katherine Jones, 10/2016-05/2017, GWU, involved in the research project on statistical modeling of rare events
- Dan Thomas Oliver, 01/2014-05/2014, NCSU, involved in the research project on estimation of value at risk
- Robert Sztukowski, 08/2011-05/2012, NCSU, involved in the research project on quantile regression analysis of sulfate data,
- Yifan Zhang, 06/2012-09/2012, from Zhejiang University, summer intern for the Global Training Initiative program at NCSU
- Chenlu Ma, 06/2012-08/2012, from Nanjing Normal University, undergraduate student for the Summer Research Program at NCSU

GRADUATE STUDENTS SUPERVISION

- Mingze Zhang, Ph.D. program, 09/2018-05/2022, GWU
 - Dissertation Title: "Copula-based Analysis for Dependent Count Data"
 - First Position: JP Morgan, New York, NY
- Xiang Peng, Ph.D., 09/2017-12/2021, GWU
 - Dissertation Title: "Advances in Subgroup Identification and Expected Shortfall Regression"
 - First Position: Senior Scientist, Merck, Philadelphia, PA
- Jui-Ying Hsieh, M.S., 09/2016-05/2018 (joint with Dr. Brandon D. Gallas from FDA), GWU
 Thesis Title: "The Split Analysis for Multiple-reader Multiple-case Split-plot Studies"
- Zhikun Gao, Ph.D. program, 09/2015-05/2019, GWU

- Dissertation Title: "Automatic Shape-constrained Non-parametric Regression"
- First Position: Data Scientist, Amazon, Seattle, WA
- David Fuyuan Li, Ph.D., 12/2014-12/2018, GWU
 - Dissertation Title: "Copula-Based Analysis of Dependent Data with Censoring and Zero-Inflation"
 - First Position: JP Morgan, New York, NY
- Yingying Zhang, Ph.D., 09/2016-08/2017, visiting Ph.D. student from Fudan University, China (joint with Dr. Z. Zhu)
 - Current Position: Assistant Professor, East China Normal University, Shanghai, China
- Kehui Wang, Ph.D., 01/2012-08/2015, NCSU
 - Dissertation Title: "Combined Estimation for Quantile Regression"
- First Position: Biosatistician II, PPD
- Mi Zhou, Ph.D., 08/2011-07/2014, NCSU
 - Dissertation Title: "Sequential Change Point Detection"
 - First Position: Quantitative Analytics Consultant, Wells Fargo
- Woosung Jang, Ph.D., 10/2011-07/2014, NCSU
 - Dissertation Title: "Semiparametric Bayesian Quantile Regression"
 - First Position: Statistician, SAS Institute Inc
- Liwen Zhang, Ph.D., 03/2012-08/2013, visiting Ph.D. student from Fudan University, China (joint with Dr. Z. Zhu)
 - Current Position: Shanghai University of Finance and Economics, China
- Pedro A. Torres-Saavedra, Ph.D., 10/2010-07/2013 (joint with Dr. D. Zhang), NCSU
 - Dissertation Title: "Quantile Regression for Repeated Responses Measured with Error"
 - Current Position: Lead Biostatistician, American College of Radiology
- Paul W. Bernhardt, Ph.D., 10/2010-05/2013 (joint with Dr. D. Zhang)
 - Dissertation Title: "Statistical Modeling with Covariates Subject to Detection Limits"
 - Current Position: Associate Professor, Department of Mathematics and Statistics, Villanova University
- Liewen Jiang, Ph.D., 06/2009-05/2012 (joint with Dr. H. Bondell), NCSU
 - Dissertation Title: "Methods for Interquantile Shrinkage in Linear Regression Models"
 - Current Position: Associate Director, Biostatistics, Agios Pharmaceuticals
- Yanlin Tang, Ph.D., 01/2010-02/2010, visiting Ph.D. student from Fudan University, China (joint with Dr. Z. Zhu) and postdoc fellow, 09/2015-08/2017.
 - Current Position: East China Normal University, Shanghai, China
- Lei Pang, Ph.D., 06/2009-05/2012 (joint with Dr. W. Lu), NCSU
 - Dissertation Title: "Semiparametric Estimation & Inference for Censored Regression Models"
 Current Position: Associate Director, Biostatistics, Genmab, Philadelphia, PA
- Jamila Tulani Mathias, Ph.D., 01/2009-11/2011 (joint with Dr. J. Monahan), NCSU
 - Dissertation Title: "Bivariate Contours for Censored Data"
 - First Position: CIT Bank, New York, NY

K-12 TEACHER MENTORING

- Shana McDowell, Fall 2016, Wake Stem Early College High School, Raleigh, NC
- Annie Polashock, Fall 2016, C.E. Jordan High School, Durham, NC
- Timothy MacArthur, Spring 2016, Northern High School, Durham, NC
- Jennifer Parker, Spring 2016, Wake STEM Early College High School, Raleigh, NC

PHD COMMITTEE MEMBER

- Miao Rui (Statistics, GWU, role: examiner, committee member, advisor: Xiaoke Zhang)
- Wu Xue (Statistics, GWU, role: examiner, committee member, advisor: Xiaoke Zhang)
- Yang Liu (Statistics, GWU, role: reader, committee member, advisor: Feifang Hu)

- Sunyan Luo (Statistics, GWU, role: reader, committee member, advisor: Emre Barut)
- Xin Li (Biostatistics, GWU, graduated 2019, role: reader, committee member, advisor: Feifang Hu)
- Yarong Feng (Statistics, GWU, graduated 2017, role: reader, advisor: Hosam Mahmoud)
- Xiaoying Yang (Statistics, GWU, graduated 2017, role: committee member, advisors: Zhaohai Li and Colin O. Wu)
- Wanying Zhao (Statistics, GWU, graduated 2017, role: committee member, advisor: Feifang Hu)
- Cheung Li (Statistics, GWU, graduated 2017, role: reader, advisors: Qing Pan and Hormuzd Katki)
- Xin Hu (03/2015, Statistics, GWU, role: committee member, advisor: Qing Pan)
- Jessie Jetter (11/2016, Statistics, GWU, graduated 2018, role: reader, advisor: Sudip Bose)
- Joshuah Touyz (Statistics, GWU, graduated 2015, role: chair of the defense, advisor: Tatiyana, Apanasovich)
- Jie Cong (10/2015, Statistics, GWU, role: reader, advisor: Hua Liang)
- Hailin Huang (Statistics, GWU, graduated 2017, role: reader, advisor: Hua Liang)
- Luke Brawley Smith (Statistics, NCSU, graduated 2015, advisor: Montserrat Fuentes)
- Weining Shen (Statistics, NCSU, graduated 2013, advisor: Subhashis Ghoshal)
- Dong Wang (Statistics, NCSU, graduated 2012, advisor: Daowen Zhang)
- Peng Song (Mathematics, NCSU, graduated 2013, advisor: Zhilin Li)
- Jiangdian Wang (Statistics, NCSU, graduated 2011, advisor: Sujit Ghosh)
- Wanying Li (Statistics, NCSU, graduated 2011, advisor: Peter Bloomfield)
- Mahendra Dia (Horticultural Science, NCSU, graduated 2011, advisor: Todd Wehner)
- Eric J Kalendra (Statistics, NCSU, graduated 2010, advisor: Montse Fuentes)
- David Heinz Schumann (Statistics, NCSU, graduated 2008, advisor: Dennis D. Boos)
- Yuefeng Wu (Statistics, NCSU, graduated 2008, advisor: Subhashis Ghoshal)
- Chia-Cheng Chen (Statistics, NCSU, graduated 2009, advisor: Huiman X. Barnhart)

MS COMMITTEE CHAIR (NON-THESIS OPTION)

- Saebitna Oh (Statistics, NCSU, 2013)
- Joanne Lo (Statistics, NCSU, 2013)
- Han Na Lee (Statistics, NCSU, 2013)
- Yan Zhang (Statistics, NCSU, 2013)
- Eun Jeong Min (Statistics, NCSU, 2013)
- Bo Zhang (Statistics, NCSU, 2011)
- Jun Wang (Statistics, NCSU, 2010)
- Malorie Beth Winters (Statistics, NCSU, 2009)
- Junjing Lin (Statistics, NCSU, 2009)
- Yaming Shao (Statistics, NCSU, 2008)

MS COMMITTEE MEMBER (THESIS OPTION)

- Manqing Ying (Biological & Agri Engineering, NCSU, 2012, chair: Lingjuan Wang)
- Junwen Wang (Economics, NCSU, 2012, chair: Ivan T. Kandilov)
- Hao Hu (Economics, NCSU, 2012, chair: Ivan T. Kandilov)

- Qifeng Weng (Economics, NCSU, 2012, chair: Atsushi Inoue)
- Tianbi Jing (Economics, NCSU, 2012, chair: Walter Thurman)
- Mai Zhou (Economics, NCSU, 2011)
- Shu Dong (Economics, NCSU, 2011)
- Christopher Ryan Ayers (Fisheries and Wildlife, NCSU, 2009)

MS COMMITTEE MEMBER (NON-THESIS OPTION)

- Todd Michael Regh (Statistics, NCSU, 2012, chair: Howard Bondell)
- Pingye Zhang (Statistics, NCSU, 2010, chair: Leonard A. Stefanski)
- Justin Replogle (Statistics, NCSU, 2010, chair: Sujit K. Ghosh)
- Haoshu Li (Statistics, NCSU, 2010, chair: John F. Monahan)
- Lu Jin (Economics, NCSU, 2010)
- Zhengyuan Chen (Statistics, NCSU, 2010, chair: Pam Arroway)
- Shuai Yuan (Statistics, NCSU, 2009, chair: Peter Bloomfield)
- Fusheng Li (Statistics/Nuclear Engineering, NCSU, 2008, chair: Dennis D. Boos)
- Wook Yeon Hwang (Statistics, NCSU, 2007, chair: Zhaobang Zeng)

EDITORIAL AND REVIEW SERVICE

- Co-Editor: Statistica Sinica, 08/2023-present
- Associate Editor:
 - Bernoulli, 2022-2023
 - The Annals of Statistics, 2013-present
 - Journal of the American Statistical Association (Theory and Methods), 2011-present
 - Stat, 01/2015-04/2021
 - Review Section of Journal of the American Statistical Association and The American Statistician, 2013-2016
- Guest Editor:
 - Computational Statistics and Data Analysis (CSDA) Special Issue on Quantile Regression and Semiparametric Methods, 2010-2011
- Grant Review:
 - National Science Foundation
 - Research Grants Council of Hongkong
 - Dutch Research Council
 - GW University Facilitating Fund
 - GW Cross-Disciplinary Research Fund

UNIVERSITY COMMITTEE WORK

The George Washington University

- Data Science Program Director Search Committee, 2021-2022
- Data Science Insitute Advisory Board, 2018-2019
- Statistics MS Curriculum committee, 2017 (chair), 202
- University Advisory Council on Research, 2016-2017
- Faculty Search Committee, 2016-2017
- MS Program Committee, 2015-2018
- Biostatistics Qualify Exam Committee, 2015, 2016
- Course Evaluation Committee, Fall 2015

• Course Equivalency and Transfer Committee, Spring 2015

North Carolina State University

- Department Advisory Committee, 2011–2014
- Seminar Committee, 2007, 2008, 2009, 2010, 2011 (chair)
- Beach Trip Committee, 2011
- Graduate Admissions Committee, 2011, 2012
- Basic Exam Committee, Spring 2008, Spring 2009 (chair), Fall 2010, Spring 2011, Fall 2012
- Faculty Search Committee, 2009
- NCSU Chinese Faculty Meeting organizer, Fall 2009, Spring 2010

PROFESSIONAL SERVICES

Committee of Presidents of Statistical Societies (COPSS)

• Secretary and Treasurer for COPSS, 01/01/2019-12/31/2021

American Statistical Association (ASA)

- Committee on Women in Statistics, 2013-2018
- Organizational Committee, Women in Statistics and Data Science Conference, 2016
- Secretary, Section on Nonparametric Statistics, 2015
- Treasurer, Section on Nonparametric Statistics, 2014
- Student Paper Competition Committee, Section on Nonparametric Statistics, 2015
- Local Organizing Committee, Women in Statistics Conference, 2014
- ICSA Program Chair of Joint Statistical Meetings (JSM), 2011
- ASA General Methodology Program Chair of JSM, 2010
- Invited Session Organizer and Chair, JSM, 2008, 2009, 2010, 2011, 2012

Institute of Mathematical Statistics (IMS)

- Member, IMS Committee on Finance, 08/2023-07/2026
- Member, IMS Council, 08/2023-07/2026
- IMS Program Chair for JSM 2023, 2022-2023
- Member, Joint Bernoulli Society/IMS Publications Management Committee, 01/01/2021-12/31/2024
- Member, IMS Committee on Nominations, 08/2020-08/2021
- Member, IMS Committee on Nominations, 08/2018-08/2019

Eastern North American Region (ENAR)

- Organizing Committee, Junior Researcher's Workshop, 2012
- Program Committee, ENAR Spring Meeting, 2011

International Chinese Statistical Association (ICSA)

- Co-Chair, *Program Committee* for ICSA Applied Statistics Symposium, 2021
- Award Committee, 2018-2019, 2019-2020, 2020-2021 (Chair)
- Program Committee, 2012
- Invited Session Organizer, ICSA Applied Statistics Symposium, 2011, 2017

Other Services

• Program Committee member for China Joint Statistical Meetings 2023

- Student Paper Competition Committee, International Indian Statistical Association (IISA) International Conference on Statistics, 2017
- Scientific Program Committee, International Conference on Econometrics and Statistics (EcoSta), 2018
- Organizing Committee, Advances in Statistical Methods for the Analysis of Observational and Experimental Data: A Symposium in Honor of Anastasios (Butch) Tsiatis, 2013
- Scientific Program Committee, CMStatistics, 2015-2018
- Organizing Committee, International Conference of Robust Statistics, 2012

MEMBERSHIPS

- American Statistical Association, 2006-present (lifetime member)
- Institute of Mathematical Statistics, 2006-present (lifetime member)
- International Chinese Statistical Association, 2006-present (lifetime member)
- International Statistical Institute, 2019-present (elected member)
- American Association for the Advancement of Science, 2019-present

PUBLICATIONS

(Note: * denotes students/postdocs advised/co-advised)

Published and In-Press

- (1) Lin, F., Zhu, H., Wang, H. and Zhu, Z. (2023). A Mixture Generalized Estimating Equations Approach for Complex Spatially-Dependent Data, *Statistical Sinica*, Under Review.
- (2) Zhang, M., Wang, H. and Livsey, J. (2023). Copula-based Analysis for Count Time Series, Statistical Sinica, Accepted.
- (3) Wang, Y., Tang, Y. and Wang, H. (2023). Score-based test for high-dimensional quantile regression with longitudinal data, *Stat*, 12(1), e610. https://doi.org/10.1002/sta4.610
- (4) Peng, X.* and Wang, H. (2023). Inference for joint quantile and expected shortfall regression. Stat, 12(1), e619. https://doi.org/10.1002/sta4.619
- (5) Peng, X.* and Wang, H. (2022). A Generalized Quantile Tree Method for Subgroup Identification, Journal of Computational and Graphical Statistics, 31:3, 824-834, DOI: 10.1080/10618600.2022.2032723
- (6) Xu, W.*, Wang, H. and Li, D. (2022). Extreme quantile estimation for single index model, *Statistica Sinica*, 32, 893-914.
- (7) Gao, T., Xu, Y., Wang, H., Sun, Q., Xie, L. and Cao, F. (2022). Combined Impacts of Climate Variability Modes on Seasonal Precipitation Extremes Over China. *Water Resour Manage*, 36, 2411–2431. https://doi.org/10.1007/s11269-022-03150-z
- (8) Tang, Y., Wang, Y., Wang, H. and Pan, Q. (2022). Conditional marginal test in high dimensional quantile regression, *Statistica Sinica*, 32, 1-24, doi:https://doi.org/10.5705/ss.202019.0304
- (9) Wang, W., Sun, Y. and Wang, H. (2023). Latent group detection in functional partially linear regression models, *Biometrics*, 79, 280-291. https://doi.org/10.1111/biom.13557
- (10) Lee, J., Sun, Y. and Wang, H. (2021). Spatial cluster detection with threshold quantile regression. Environmetrics, 32(8), e2696. https://doi.org/10.1002/env.2696

- (11) Zhang, Y*, Wang, H. and Zhu, Z (2022). Single-index thresholding in quantile regression, Journal of the American Statistical Association (Theory and Methods), 117:540, 2222-2237, DOI: 10.1080/01621459.2021.1915319
- (12) Agarwal, G., Sun, Y. and Wang, H. (2021). Multiple Indicator Kriging for non-Gaussian Random Fields, *Spatial Statistics*, Volume 44, 100524, ISSN 2211-6753
- (13) Li, X., Wang, L. and Wang, H (2021). Sparse learning and structure identification for ultra-highdimensional image-on-scalar regression, *Journal of the American Statistical Association (Theory and Methods)*, 116:536, 1994-2008, DOI: 10.1080/01621459.2020.1753523
- (14) Yu, T., Xiang, L. and Wang, H (2020). Quantile regression for survival data with covariates subject to detection limits, *Biometrics*, 1–12, DOI: 10.1111/biom.13309.
- (15) Hu, Y., Wang, H, He, X. and Guo, J. (2021). Bayesian joint-quantile regression, Computational Statistics, 36, 2033–2053, DOI: 10.1007/s00180-020-00998-w
- (16) Gao, Z.*, Tang, Y.*, Wang, H., Wu, G., and Lin, J. (2020). Automatic identification of curve shapes with applications to ultrasonic vocalization, *Computational Statistics and Data Analysis*, 148, 106956. DOI: 10.1016/j.csda.2020.106956
- (17) He, F., Wang, H. and Tong, T. (2019). Extremal quantile regression for Weibull-type tails, *Statistica Sinica*, 30, 1357-1377, DOI: 10.5705/ss.202018.0073.
- (18) Tang, Y.*, Wang, H., Sun, Y. and Hering, A. S. (2019). Copula-based Forecast and Interpolation for Spatio-Temporal Data, *Biometrics*, DOI:10.1111/biom.13066.
- (19) Zhang, Y.*, Wang, H. and Zhu, Z. (2019). Quantile-regression-based clustering for panel data, Journal of Econometrics, 213, 54-67, DOI: 10.1016/j.jeconom.2019.04.005.
- (20) Li, F.*, Tang, Y.* and Wang, H. (2019). Copula-based semiparametric analysis for time series data with detection limits, *Canadian Journal of Statistics*, 47, 438-454, DOI:10.1002/cjs.11503.
- (21) Zhang, Y.*, Wang, H. and Zhu, Z. (2019). Robust subgroup identification, *Statistica Sinica*, 29, 1873-1889, doi:10.5705/ss.202017.0179.
- (22) Wang, H., Feng, X. and Dong, C. (2019). Copula-based quantile regression for longitudinal data, *Statistica Sinica*, 29, 245-264, DOI: 10.5705/ss.202016.0135.
- (23) Li, D. and Wang, H. (2019). Extreme quantile estimation for autoregressive models, Journal of Business & Economic Statistics, 37, 661-670
- (24) Tang, Y.*, Wang, H. and Barut, E. (2018). Testing the presence of significant covariates through conditional marginal regression, *Biometrika*, 105, 57-71.
- (25) Wang, H., McKeague, I. and Qian, M. (2018). Testing for marginal linear effects in quantile regression, Journal of the Royal Statistical Society: Series B, 80, 433-452.
- (26) Tang, Y.*, Wang, H. and Liang, H. (2018). Composite estimation for single-index model with responses subject to detection limits, *Scandinavian Journal of Statistics*, 45, 444-464, DOI: 10.1111/sjos.12307.
- (27) Yang, X. et al. (2018). Gastrin Protects Against Myocardial Ischemia/Reperfusion Injury via Activation of RISK (Reperfusion Injury Salvage Kinase) and SAFE (Survivor Activating Factor Enhancement) Pathways, Journal of the American Heart Association, 7:e005171.
- (28) Gao, T., Wang, H. and Zhou, T. (2017). Changes of extreme precipitation and nonlinear influence of climate variables over Monsoon region in China. Atmospheric Research, 197, 379-389.
- (29) Hu, J., Zhang, L.* and Wang, H. (2016). Sequential model selection based segmentation to detect DNA copy number variation. *Biometrics*, 72, 815-826.
- (30) Sun, Y., Wang, H. and Fuentes, M. (2016). Fused Lasso for spatial and temporal quantile function estimation. *Technometrics*, 58, 127-137.

- (31) Wang, K.* and Wang, H. (2016). Optimally combined estimation for tail quantile regression. Statistica Sinica, 26, 295-311.
- (32) Yang, Y., Wang, H. and He, X. (2016). Posterior inference in Bayesian quantile regression with asymmetric Laplace likelihood (Discussion Paper). *International Statistical Review*, 84, 327-344.
- (33) Zhou, M.*, Wang, H. and Tang, Y. (2015). Sequential change point detection in linear quantile regression models. *Statistics and Probability Letters*, 100, 98-103.
- (34) Zhang, L.*, Wang, H. and Zhu, Z. (2017). Composite change point estimation for bent line quantile regression. Annals of the Institute of Statistical Mathematics, 69, 145-168.
- (35) Tang, Y. and Wang, H. (2015). Penalized regression across multiple quantiles under random censoring. Journal of Multivariate Analysis, 141, 132-146.
- (36) Pang, L.*, Lu, W. and Wang, H. (2015). Local Buckley-James estimation for the heteroscedastic accelerated failure time model. *Statistica Sinica*, 25, 863-877.
- (37) Dupis, D., Sun, Y. and Wang, H. (2015). Detecting change-points in extremes. *Statistics and Its Interface*, 8, 19-31.
- (38) Jang, W.* and Wang, H. (2015). A semiparametric Bayesian approach for quantile regression with clustered data. *Computational Statistics and Data Analysis*, 84, 99-115.
- (39) Bernhardt, P. W.*, Zhang, D. and **Wang, H.** (2015). A fast EM algorithm for fitting joint models of a binary response and multiple longitudinal covariates subject to detection limits. *Computational Statistics and Data Analysis*, 85, 37-53.
- (40) Zhang, L.*, Wang, H. and Zhu, Z. (2014). Testing for change points due to a covariate threshold in regression quantiles. *Statistica Sinica*, 24, 1859-1877.
- (41) **Wang, H.** and Wang, L. (2014). Quantile regression analysis of length-biased survival data. *Stat*, 3, 31-47.
- (42) Jiang, L.*, Bondell, H. and Wang, H. (2014). Interquantile shrinkage and variable selection in quantile regression. *Computational Statistics and Data Analysis*, 69, 208-219.
- (43) Bernhardt, P. W.*, Wang, H. and Zhang, D. (2014). Flexible modeling of survival data with covariates subject to detection limits via multiple imputation. *Computational Statistics and Data Analysis*, 69, 81-91.
- (44) Wang, H. and Li, D. (2013). Estimation of extreme conditional quantiles through power transformation. Journal of the American Statistical Association (Theory and Methods), 108, 1062-1074.
- (45) Torres, P. A.*, Zhang, D. and Wang, H. (2013). Constructing conditional reference charts for grip strength measured with error. *Topics in Applied Statistics—2012 Symposium of the International Chinese Statistical Association*, 299-310, Springer, New York.
- (46) Bernhardt, P. W.*, Wang, H. and Zhang, D. (2013). Statistical methods for generalized linear models with covariates subject to detection limits. *Statistics in Biosciences*, DOI 10.1007/s12561-013-9099-4.
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