# TAO WANG

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#### **EMPLOYMENT**

University of Victoria British Columbia, Canada Assistant Professor, Department of Economics 2022-present Assistant Professor, Department of Mathematics and Statistics (Cross-Listed) 2024-2027

# **EDUCATION**

Ph.D., Economics, University of California, Riverside

M.A., Economics, Virginia Tech, Blacksburg

December 2016

#### RESEARCH AREAS

Econometrics, Nonparametric Statistics, Machine Learning

# **PUBLICATIONS**

- "Modal Volatility Function" (with Ullah, A.), *Journal of Time Series Analysis*, 2024+, accepted.
- "Kernel Mode-Based Regression under Random Truncation" (with Yao, W.), *Statistica Sinica*, 2024+, available online.
- "Optimal Subsampling for Functional Quasi-Mode Regression with Big Data," *Journal of Computational and Graphical Statistics*, 2024+, available online.
- "Distributed Learning for Kernel Mode-Based Regression," *The Canadian Journal of Statistics*, 2024+, available online.
- "Parametric Modal Regression with Autocorrelated Error Process," *Statistica Sinica*, 2023+, available online.
- "Nonlinear Kernel Mode-Based Regression for Dependent Data," *Journal of Time Series Analysis*, 2024, 45 (2), 189-213.
- "Nonparametric Estimator for Conditional Mode with Parametric Features," *Oxford Bulletin* of *Economics and Statistics*, 2024, 86 (1), 44-73.
- "Semiparametric Partially Linear Varying Coefficient Modal Regression" (with Ullah, A. and Yao, W.), *Journal of Econometrics*, 2023, 235 (2), 1001-1026.
- "Nonlinear Modal Regression for Dependent Data with Application for Predicting COVID-19" (with Ullah, A. and Yao, W.), *Journal of the Royal Statistical Society Series A*, 2022, 185 (3), 1424-1453.
- "Modal Regression for Fixed Effects Panel Data" (with Ullah, A. and Yao, W.), *Empirical Economics* (Special Issue on Honouring Badi Baltagi), 2021, 60, 261-308.

• "A Machine Learning Strategy for Autism Screening in Toddlers" (with Achenie, L. E. K., Scarpa, A., Factor, R. S., Robins, D. L., and McCrickard, S.), *Journal of Developmental & Behavioral Pediatrics*, 2019, 40 (5), 369-376.

# **OTHERS**

- "Discussion of 'Vintage Factor Analysis with Varimax Performs Statistical Inference'," *Journal* of the Royal Statistical Society Series B, 2023, 85 (4), 1092-1093.
- "Discussion of 'Modeling the COVID-19 Infection Trajectory: A Piecewise Linear Quantile Trend Model'," *Journal of the Royal Statistical Society Series A*, 2022, 185 (4), 1819-1821.

# WORKING PAPERS

"Envelope Kernel Mode-Based Regression" (Reject & Resubmit)

"Estimation and Testing of Forecast Rationality with Many Moments" (with Tae-Hwy Lee, R&R)

"Online Kernel-Based Mode Learning" (with Weixin Yao, R&R)

"Semi-Functional Varying Coefficient Mode-Based Regression" (R&R)

"SPVC Modal Regression with an Error-Prone Linear Covariate" (R&R)

"Modal Regression Discontinuity Designs" (with Aman Ullah)

# AWARDS AND HONORS

| SSHRC Insight Development Grant (PI, \$47,611)                            | 2023 - 2025   |
|---|---------------|
| UVic-SSHRC Explore Grant (PI, \$7,000)                                    | 2023-2024     |
| UVic Conference Travel Grant (\$1,000)                                    | $2023,\ 2024$ |
| UVic Research Start-Up Grant (\$20,000)                                   | 2022-2027     |
| Dissertation Year Program Fellowship, UC Riverside                        | 2021          |
| "Fu Rong" Academic Scholarship, Hunan Youth Development Foundation, China | 2014          |
| National Scholarship, Ministry of Education, China                        | 2012, 2013    |

# Conference and Seminar Presentations

- 2024 University of Illinois Urbana-Champaign\*, University of British Columbia (Statistics)\*, University of Calgary (Statistics)\*, University of Washington, University of Iowa (Educational Measurement and Statistics), University of Iowa (Statistics), University of Victoria (Brown Bag), SIAM Conference on Parallel Processing for Scientific Computing (Invited), 6th ICSA-Canada Chapter Symposium (Invited), California Econometrics Conference
- 2023 Simon Fraser University, Purdue University, University of California Davis, University of California Irvine, University of California Riverside, University of Victoria (Statistics), Iowa State University, Huazhong University of Science and Technology, Hunan University, Zhejiang University of Finance & Economics, International Society for Business and Industrial Statistics (Invited), EcoSta (Invited), Canadian Econometrics Study Group

<sup>&</sup>quot;Nonparametric Spatial Modeling towards the Mode" (with Weixin Yao)

<sup>\*</sup> represents scheduled.

- 2022 University of Iowa, University of Victoria, Queen Mary University of London, Ca' Foscari University of Venice, California Polytechnic State University at San Luis Obispo, Newcastle University, NEOMA Business School, University of Victoria (Brown Bag), ESAM, CES, AMES in China, AFES, CEA Conference, California Econometrics Conference (Poster Session), ASSA (Poster Session)
- 2021 Bangor University, University of California Riverside, Freddie Mac, CFE-CMStatistics (Invited), SEA, CES, International Workshop Spatial Econometrics and Statistics, ISI WSC, IAAE Annual Conference, Bernoulli-IMS World Congress in Probability and Statistics, WEAI International Conference, AFES, AMES, LAMES, EEA-ESEM, JSM, RSS International Conference, RCEA Money, Macro & Finance Conference, Bristol Econometric Study Group, CEA Conference, RCEA Time Series Workshop, NBER-NSF Time Series Conference (Poster Session)

2020 Econometric Society World Congress

### TEACHING EXPERIENCE

#### University of Victoria

| ECON 548 Applied Econometric Modelling (Graduate) | Spring 2023, 2024, 2025 |
|---|-------------------------|
| ECON 366 Econometrics: Part II (Undergraduate)    | Spring 2023, 2024, 2025 |
| ECON 365 Econometrics: Part I (Undergraduate)     | Fall 2024               |

#### University of California Riverside

| ECON 2681 Mini-Statistics (Graduate)                        | Summer 2020, 2021 |
|---|-------------------|
| ECON 162 Managerial Economics (Undergraduate)               | Summer 2019, 2021 |
| ECON 105B Intermediate Macroeconomic Theory (Undergraduate) | Summer 2021       |

#### **Teaching Certificate**

Instructional Skills Workshop May 2023

#### Professional Activities

University of Victoria Department Seminar Committee July 2022-present

Department Working Paper Series Coordinator July 2022-present

Department Econometrics Oversight Committee July 2022-June 2023

Conference Reviewer for Proposals-National Council on Measurement in Education 2025

Scientific Programme Committee-EcoSta 2025

Scientific Programme Committee-EcoSta 2024

Session Organizer (Econometric Modeling with Time Series)-EcoSta 2023

Session Organizer (Recent Developments in Nonparametric Econometrics)-CEA 2023

Session Chair (Econometric Modeling with Time Series)-EcoSta 2023

Session Chair (Recent Developments in Nonparametric Econometrics)-CEA 2023

Session Chair (Econometric Methods)-WEAI 96th Annual Conference

Session Chair (Rational Behavior)-11th RCEA Money-Macro-Finance Conference

Session Chair (Simultaneous Equations)-2021 Latin American Meeting of the ES

Referee for Journal of Econometrics, Journal of the American Statistical Association, Review of Economics and Statistics, Journal of Financial Econometrics, Review of Development Economics, Econometric Reviews, Computational Economics, Journal of Multivariate Analysis, Econometrics, Australian & New Zealand Journal of Statistics, Statistical Methods & Applications, Journal of Quantitative Economics, Journal of Business Cycle Research, Journal of Business Economics and Management, Statistical Papers, Entropy, Biometrical Journal, The Canadian Journal of Statistics, Journal of Computational and Graphical Statistics, The Polish Statistician, Psychological Assessment, IEEE Transactions on Cybernetics

Students Supervised Xiao Gao (Ph.D. in Statistics, UC Riverside) Continuing Co-Supervisor

Mohammad Hossein Younesi (M.A. Essay) Continuing

Tao He (M.A. Essay) Continuing

Supervisor

Mohsen Fazeli 2024. (M.A. Essay)-Completed

Supervisor

Keegan Lawrence 2024. (M.A. Essay)-Completed

Supervisor