

YOUNGSEOK SONG

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ACADEMIC POSITIONS

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|---|-----------|
| West Virginia University , Morgantown, WV
Assistant Professor, Department of Statistics | 2023- |
| École Polytechnique Fédérale de Lausanne , Lausanne, Switzerland
Collaborateur scientifique (Post-doc), SB MATH SDS
working with Prof. Sofia C. Olhede | 2021-2023 |

EDUCATION

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|---|------|
| Colorado State University , Fort Collins, CO
Dissertation: <i>Some Topics in High-Dimensional Robust Inference and Graphical Modeling</i> .
Advisor: Dr. Wen Zhou
PhD, Statistics | 2021 |
| Colorado State University , Fort Collins, CO
M.S., Statistics | 2017 |
| POSTECH , South Korea
M.S., Mathematics | 2010 |
| POSTECH , South Korea
B.S., Mathematics | 2008 |

RESEARCH INTEREST

Statistical network analysis, high-dimensional statistics, multiple testing, graphical models, robust statistics, statistical genomics and genetics.

PUBLICATIONS

- Chang J., Qiu Y., Song Y., and Zhou W. (2023+). Model Specification Tests for Dependence Structure of Gaussian Markov Random Fields on Temporally Dependent Data. To be submitted.
- Song Y. and Zhou W. (2023+). Learning Graphical Model with Uniform Performance via Distributional Robust Optimization. To be submitted.

Song Y., Zhou W., and Zhou W.-X. (2023). Large-Scale Inference of Multivariate Regression for Heavy-Tailed and Asymmetric Data. *Statistica Sinica*, 33, pp. 1831–1852.

Fisher E. K., Song Y., Hughes K. A., Zhou W., and Hoke K. L. (2021). Non-Parallel Transcriptional Divergence during Parallel Adaptation. *Molecular Ecology*, 30 (6), pp. 1516–1530.

PRESENTATIONS

Invited

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| <i>CMStatistics 2022</i> , London, UK | 2022 |
| Learning Graphical Model with Uniform Performance via Distributional Robust Optimization | |
| <i>The Statistical Learning and Data Science</i> , Irvine, CA | 2020 |
| Joint Robust Multiple Inference on Large-scale Multivariate Regression.
(canceled due to Covid-19 pandemic) | |

Contributed

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| <i>Swiss Statistics Seminar</i> , Bern, Switzerland (<i>Poster</i>) | 2022 |
| Large-Scale Inference of Multivariate Regression for Heavy-Tailed and Asymmetric Data. | |
| <i>ICSA Applied Statistics Symposium</i> , Online (<i>Poster</i>) | 2020 |
| Joint Robust Multiple Inference on Large-scale Multivariate Regression. | |
| <i>Joint Statistical Meeting</i> , Denver, CO | 2019 |
| Robust Inference on High Dimensional Multiple Regressions with Application to Biomarker Screening. | |
| <i>ASA CO/WY Chapter Meeting</i> , Fall 2018, Denver, CO | 2018 |
| Robust Inference on High Dimensional Multiple Regressions with Application to Biomarker Screening. | |
| <i>Joint Statistical Meeting</i> , Vancouver, Canada | 2018 |
| Model Specification Test of Dependence Structures for Gaussian Markov Random Field Model Based on Temporal Data. | |
| <i>Joint Statistical Meeting</i> , Baltimore, MD (<i>Poster</i>) | 2017 |
| Assessing the Dependency for Spatio-temporal Observations on Evolving Networks by GMRF. | |
| <i>14th Graybill Conference</i> , Fort Collins, CO (<i>Poster</i>) | 2017 |
| Assessing the Local Dependency of Observations on Evolving Networks by MRF. | |

HONORS

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| Boes Award For Excellence In Teaching, Department of Statistics, CSU | 2021 |
| Department Distinguished Service Award, Department of Statistics, CSU | 2018 |
| Student Poster Awarded (3rd place), 14th Graybill Conference, Fort Collins, CO | 2017 |
| James R. zumBrunnen Statistical Collaboration Award, Department of Statistic, CSU | 2017 |

TEACHING

EPFL

Advising Master's semester projects: Zineb Agnaou (S22), Seorim Park (F22), Wael Gafaiti (S23)¹

(TA) MATH 342: Time series S22, S23

Colorado State University

Instructor/Course Development as a Graduate Teaching Assistant

STAT 301: Introduction to Statistical Methods	S20
STAT 307: Introduction to Biostatistics	F18, Sm20
STAT 472: Statistical Research: Design, Data & Methods	S19, F19, F20, S21
STAA 566: Statistical Consulting	Sm21

Short courses

Python primer for Master of Applied Statistics program S20

Recitations

STAT 201: General Statistics	S18
STAT 315: Introduction to the Theory and Practice of Statistics	S21

Distance Course Coordinator

STAA 551: Regression Models and Applications	F16, S17
STAA 552: Generalized Regression Models	F16
STAA 565: Quantitative Reasoning	F16, F17, S19
STAA 566: Computational and Graphical Methods	S16
STAA 567: Computational and Simulation Methods	F17
STAA 571: Survey Statistics	F17
STAA 572: Nonparametric Methods	F16
STAA 573: Analysis of Time Series	F16

POSTECH

Recitations

MATH 111: Calculus I	S08, Sm08
MATH 260: Probability and Statistics	S09, F09

SERVICE & PROFESSIONAL MEMBERSHIP

Departmental Service, Department of Statistics, Colorado State University

Student Organized Activities and Research Seminars (SOARS) F17-S18 (organizer)

¹S: spring, Sm: summer, F: fall

Conference Organization

21th IMS New Researchers Conference, Student organizer, Fort Collins, CO

2019

Reviewer

Statistics, Journal of Business & Economic Statistics, Annals of the Institute of Statistical Mathematics Journal of Multivariate Analysis