

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. (2024+). Model Specification Tests for Dependence Structure of Gaussian Markov Random Fields on Temporally Dependent Data. To be submitted.
- Fisher E. K., Song Y., Zhou W., and Hoke K. L. (2024+). Non-Parallel Transcriptional Divergence during Parallel Adaptation.

Song Y. and Zhou W. (2024+). 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

<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

<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

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

West Virginia University

STAT 215: Introduction to Probability and Statistics F23¹

EPFL

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

¹S: spring, Sm: summer, F: fall

SERVICE & PROFESSIONAL MEMBERSHIP

Departmental Service, Department of Statistics, Colorado State University

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

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, Scandinavian Journal of Statistics