Mihyun Kim

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Academic Positions

West Virginia University, Morgantown, WV Aug 2022 - Present
  Assistant Professor, Department of Statistics

University of Waterloo, Waterloo, ON, Canada Sep 2021 - July 2022
  Postdoctoral Fellow, Department of Statistics and Actuarial Science
  Supervisor: Greg Rice

Education

Colorado State University, Fort Collins, CO, USA Aug 2016 - Aug 2021
  Dissertation: Heavy tail analysis for functional and internet anomaly data
  PhD, Statistics
  Advisor: Piotr Kokoszka

Yonsei University, Seoul, S. Korea 2012
  Masters of Mathematics

Yonsei University, Seoul, S. Korea 2009
  Bachelor of Mathematics, Civil engineering

Research Interest

Functional data analysis, heavy tail analysis, time series, extreme value theory, extremal dependence, statistical machine learning, applications to health research.

Publications

Published

1. **Kim, M.**, Kokoszka, P. (2022). Extremal dependence measure for functional data. *Journal of Multivariate Analysis*, **189**, 104887.

2. Nigg C., Nigg C., **Kim M.**, Sharp, J., Burg, X., Cunningham-Sabo, L. (2022). Evaluating the association of epoch-length with meeting physical activity guidelines in children. *The 8th International Society for Physical Activity and Health Congress, accepted.*

3. **Kim, M.**, Kokoszka, P. (2020). Consistency of the Hill estimator for time series observed with measurement errors. *Journal of Time Series Analysis*, **41**, 421–435.

4. **Kim, M.**, Kokoszka, P. (2019). Hill estimator of projections of functional data on principal components. *Statistics*, **53**, 699–720.

5. **Kim, M.**, Kim, J., Yoon, J. (2015). Optimal portfolio selection under stochastic volatility and stochastic interest rates. *Journal of the Korean Society for Industrial and Applied Mathematics*, **19**, 417–428.

Under review

1. **Kim, M.**, Kokoszka, P. (2022+). Hill-type estimators applied to error contaminated data: large sample normality and confidence intervals. *submitted*.

2. **Kim, M.**, Kokoszka, P., Rice, G. (2022+) White noise testing for functional time series. *submitted*.

PRESENTATIONS

Invited Presentations in Conferences/Workshops

Invited Seminars and Presentations

Chair of Statistical Data Science, EPFL (group meeting).	2022
Department of Mathematics and Data Science, West Virginia University.	2022
Department of Mathematics and Statistics, Auburn University.	2022
Department of Mathematics and Statistics, Montana State University.	2021

Contributed

Joint Statistical Meetings, virtual,	2020
Joint Statistical Meetings, Denver, CO,	2019
Extreme Value Analysis, Zagreb, Croatia,	2019
Colorado Wyoming Chapter of the ASA's Spring Meeting, Boulder, CO,	2019

AWARD

James L., M. Leslie, and Edna Madison Memorial Award,   2020
This award is given to the student selected by the statistics faculty as the outstanding graduate student in the Department of Statistics at CSU.

Department Distinguished Service Award,   2019
This award honors a student for the service given to the Department of Statistics at CSU.

TEACHING EXPERIENCE

University of Waterloo

Instructor

STAT 220: Probability theory W22

Colorado State University

Instructor

STAT 301: Introduction to Applied Statistical Methods S21*
STAT 307: Introduction to Biostatistics F19
* delivered in a hybrid and asynchronous format during pandemic, with lectures pre-recorded by another instructor and recitation-type classes run by Mihyun Kim.

Recitation

STAA 577: Statistical Learning and Data Mining S19
STAT 201: General Statistics F18

Course Development

STAT 472: Statistical Consulting Capstone

*Distance Course Coordinator***

STAT 315: Introduction to Theory and Practice of Statistics Sm21
STAT 201: General Statistics Sm21
STAT 301: Introduction to Applied Statistical Methods F20
STAA 577: Statistical Learning and Data Mining S19
STAA 552: Generalized Regression Models Sm18
** run courses in a virtual and asynchronous format, with lectures pre-recorded by another instructor.

Teaching Assistant

STAT 521: Stochastic Processes F20
DSCI 445: Statistical Machine Learning F20
STAT 530: Mathematical Statistics S20
STAA 554: Mixed Models S20
STAA 553: Experimental Design S20
STAA 578: Machine Learning S19
STAA 566: Data Visualization Methods F18
STAA 577: Statistical Learning and Data Mining S18
STAA 565: Quantitative Reasoning S18
STAA 552: Generalized Regression Models F17

STAA 551: Regression Models and Applications	F17, S18
Master of Applied Statistics Bootcamp	Sm17
STAT 430: Probability and Mathematical Statistics II	S17
STAT 312: Statistics for Behavioral Sciences II	S17
STAT 420: Probability and Mathematical Statistics I	F16
STAT 311: Statistics for Behavioral Sciences I	F16

SERVICE & PROFESSIONAL MEMBERSHIP

Service

| ASA's Continuing Education Program at JSM monitor | 2020 |
| The 14th Graybill Conference at CSU volunteer | 2017 |

Reviewer

Journal of Multivariate Analysis, Metrika

Professional Membership

Member: ASA

COMPUTER SKILLS

Proficient in R, Matlab
Experienced Python, C, VBA, SQL

Last updated: August 15, 2022