# 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

2009

Masters of Mathematics

Yonsei University, Seoul, S. Korea

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. (2021). How should we choose the most appropriate Epoch-Length for Children's Physical Activity? *Proceedings from the 8th International Society for Physical Activity and Health Congress*, 14(3).

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- 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.

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# University of Waterloo

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STAT 220: Probability theory

W22

# Colorado State University

# Instructor

STAT 301: Introduction to Applied Statistical Methods
STAT 307: Introduction to Biostatistics
F19
\* delivered in a hybrid and asynchronous format during pandemic, with lectures pre-recorded by

\* 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	$\mathrm{Sm}21$
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

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STAA 551: Regression Models and Applications Master of Applied Statistics Bootcamp STAT 430: Probability and Mathematical Statistics II STAT 312: Statistics for Behavioral Sciences II STAT 420: Probability and Mathematical Statistics I STAT 311: Statistics for Behavioral Sciences I	F17, S18 Sm17 S17 S17 F16 F16
Service & Professional Membership	
Service	
ASA's Continuing Education Program at JSM monitor The 14th Graybill Conference at CSU volunteer	2020 2017
Reviewer	
$Journal\ of\ Multivariate\ Analysis,\ Metrika$	
Professional Membership	
Member: ASA	

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

Computer Skills

Last updated: August 15, 2022

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