Peng Zhong

Updated October 13, 2021

Email: peng.zhong@kaust.edu.sa
GitHub: github.com//PangChung
Phone: (966) 056 - 5679141
Website: pangchung.github.io

Research Interests

Extremes; High dimensional inference; Machine learning; Nonparametric statistics

Education

King Abdullah University of Scicence and Technology Saudi Arabia
PhD in Statistics, GPA: 3.69/4 1, 2019 – Present
Advisor: Prof. Raphaël Huser

King Abdullah University of Scicence and Technology Saudi Arabia
MS in Statistics, GPA: 3.72/4 8, 2017 – 12, 2018
Advisor: Prof. Raphaël Huser

Southern University of Science and Technology Shenzhen, China
BA in Financial Mathematics 8, 2013 – 6, 2017

Honors & Scholarships

National Encouragement Scholarship (SUSTech) 2015
Establishment of SUSTech Scholarship (SUSTech) 2013

Publications

Exact simulation of max-infinitely divisible processes
Peng Zhong, Raphaël Huser, and Thomas Opitz.
arXiv preprint 2103.00533, submitted, 2021

Modeling non-stationary temperature maxima based on extremal dependence changing with event magnitude
Peng Zhong, Raphaël Huser, and Thomas Opitz
Annals of Applied Statistics, to appear, 2021

Inference for max-stable processes based on the Vecchia approximation
Raphaël Huser, Michael Stein, and Peng Zhong
In preparation

Are spatial precipitation extremes becoming more intense, wider, or both? An extreme-value statistics perspective.
Peng Zhong, Manuela Brunner, Raphaël Huser, and Thomas Opitz
In preparation

Partial tail correlation coefficient
Yan Gong, Peng Zhong, Raphaël Huser, and Thomas Opitz
In preparation

Joint modeling of massive spatio-temporal wildfire count and burnt area data with the INLA–SPDE approach
Zhongwei Zhang, Elias Krainski, Peng Zhong, Håvard Rue and Raphaël Huser
In preparation

Teaching Experience

Teaching assistant, CEMSE (KAUST) Fall, 2020
STAT 250: Stochastic Processes
Grading homework and exams; Giving tutorial; Q & A;

Teaching assistant, Mathematics (SUSTech) Spring 2017
Real Analysis
Grading homework and exams; Q & A;

Industry Experience

CSMAR Database Shenzhen, China
Data Analyst (Intern) Summer 2016
Data analysis; Data scraping; Present and review literature in Finance;

Talks & Posters

Talk: Modeling non-stationary temperature maxima based on extremal dependence changing with event magnitude 6, 2021
Extreme Value Analysis 2021 (Virtual), UK

Poster: Exact simulation of max-infinitely divisible processes 5, 2021
RESIM 2021: 13th International Workshop on Rare-Event Simulation, Paris, France (Virtual)

Talk: Exact simulation of max-infinitely divisible processes 2, 2021
Virtual workshop on ”Statistical Estimation and Detection of Extreme Hot Spots, with Environmental and Ecological Applications”, KAUST, Saudi Arabia

Talk: Modeling non-stationary temperature maxima based on extremal dependence changing with event magnitude 2, 2021
Virtual workshop on ”Statistical Estimation and Detection of Extreme Hot Spots, with Environmental and Ecological Applications”, KAUST, Saudi Arabia

Contributed Talk: Modeling non-stationary temperature extremes with level-dependent extremal dependence 8, 2020
Joint Statistical Meetings (Virtual), USA

Poster: Modeling spatial extremes with max-infinitely divisible models level-dependent extremal dependence 7, 2019
Joint Statistical Meetings, Denver, Colorado, USA

Skills

Programming

R, C++, Python, Shell, Slurm.

Other

Latex, Markdown, MS Office.

Languages

Mandarin, English

Professional Memberships

American Statistical Association (ASA) Regular Member