ALEXANDER GIESSING

giessing@uw.edu

`https://agiessing.github.io`

EDUCATION

University of Michigan, Ann Arbor 2012 – 2018
Ph.D. in Statistics *Ann Arbor, Michigan, US*

· Advisor: Professor Xuming He
· Thesis: "On High-Dimensional Misspecified Quantile Regression"

London School of Economics and Political Science 2011 – 2012
M.Sc. in Econometrics and Mathematical Economics (Distinction) *London, GB*

· Full tuition fee scholarship for academic excellence awarded by the
German National Academic Foundation

University of Bonn 2007 – 2011
B.Sc. in Economics (Distinction) *Bonn, DE*

· Exchange student at the University of British Columbia during the
academic year 2009/10

EMPLOYMENT

Department of Statistics, University of Washington 2021 – Present
Acting Assistant Professor *Seattle, Washington, US*

Dept. of Operations Research & Financial Engineering, Princeton University 2018 – 2021
Postdoctoral Research Associate *Princeton, New Jersey, US*

· Advisor: Professor Jianqing Fan

GRANTS

NSF DMS-2310578 "Semiparametric Efficient & Robust Inference on High-Dim. Data" 2023 – 2026
Principle Investigator *$175,000*

RESEARCH PAPERS

Preprints

[1] Alexander Giessing. *Anti-concentration of suprema of Gaussian processes and Gaussian order statistics*. 2023.

[2] Alexander Giessing. *Gaussian and bootstrap approximations for suprema of empirical processes*. 2023. arXiv: 2309.01307.

[3] Alexander Giessing. *Upper bounds on suprema of empirical processes via generic chaining*. 2023.

[4] Alexander Giessing and Jianqing Fan. *A bootstrap hypothesis test for high-dimensional mean vectors*. 2023. arXiv: 2309.01254.

[5] Yikun Zhang, Alexander Giessing, and Yen-Chi Chen. *Efficient Inference on High-Dimensional Linear Models with Missing Outcomes*. 2023. arXiv: 2309.06429.

[6]   Alexander Giessing and Jianqing Fan. *Bootstrapping ℓ_p-Statistics in High Dimensions*. 2020. arXiv: 2006. 13099.

Journal Publications and Conference Proceedings

[1]   Alexander Giessing and Jingshen Wang. "Debiased inference on heterogeneous quantile treatment effects with regression rank-scores". In: *Journal of the Royal Statistical Society, Series B (Statistical Methodology)* (2023).

[2]   Alexander Giessing and Xuming He. "On the predictive risk in misspecified quantile regression". In: *Journal of Econometrics* 213.1 (2019), pp. 235–260.

[3]   Bara Alsalaheen, Kayla Stockdale, Dana Pechumer, Alexander Giessing, Xuming He, and Steven P. Broglio. "Cumulative Effects of Concussion History on Baseline Computerized Neurocognitive Test Scores: Systematic Review and Meta-analysis". In: *Sports Health* 9.4 (2017), pp. 324–332.

[4]   Kristjan Greenewald, Seyoung Park, Shuheng Zhou, and Alexander Giessing. "Time-dependent spatially varying graphical models, with application to brain fMRI data analysis". In: *Advances in Neural Information Processing Systems*. Ed. by I. Guyon, U. Von Luxburg, S. Bengio, H. Wallach, R. Fergus, S. Vishwanathan, and R. Garnett. Vol. 30. Curran Associates, Inc., 2017.

[5]   Edward L. Ionides, Alexander Giessing, Ya'acov Ritov, and Scott E. Page. "Response to the ASA's Statement on p-Values: Context, Process, and Purpose". In: *The American Statistician* 71.1 (2017), pp. 88–89.

TALKS & PRESENTATIONS

EcoSta 2024   July 2024
Beijing, CN   *Session speaker (invited)*

2023 Joint Statistical Meetings   August 2023
Toronto, CA   *Session speaker (invited)*

2023 ICSA Applied Statistics Symposium   June 2023
Ann Arbor, Michigan, US   *Session speaker (invited)*

University College London   November 2022
Department of Statistics   *Seminar speaker (invited)*

COMPSTAT 2022   August 2022
Bologna, IT   *Session speaker (contributed)*

2022 Joint Statistical Meetings   August 2022
Washington, D.C., US   *Session speaker (invited)*

22nd Meeting of New Researchers in Statistics and Probability   August 2022
Fairfax, Virginia, US   *Session speaker (contributed)*

2022 ICSA Applied Statistics Symposium   June 2022
Gainesville, Florida, US   *Session speaker (invited)*

University of Washington   January 2022
Department of Biostatistics   *Seminar speaker (invited)*

CMStatistics 2019   December 2019
London, GB   *Session speaker (invited)*

2018 International Conference on Data Science   December 2018
Shanghai, CN   *Session speaker (invited)*

TEACHING

STAT 591: Gaussian & Empirical Process Theory for High-Dim. Data
Special Topics Graduate Course, Spring 2023
University of Washington
Department of Statistics

· Network-wide graduate course at the Pacific Institute for the Mathematical Sciences (PIMS)

STAT 516: Stochastic Modeling of Scientific Data I
Graduate Course, Fall 2023
University of Washington
Department of Statistics

STAT/ MATH 394: Probability I
Undergraduate Course, Spring 2022
University of Washington
Department of Statistics

STAT 390: Statistical Methods in Engineering and Science
Undergraduate Course, Fall '21, '22, '23; Winter '22, '23; Spring '22, '23
University of Washington
Department of Statistics

ORF 245: Fundamentals of Statistics
Undergraduate Course, Spring 2019
Princeton University
Dept. of Operations Research & Financial Engineering

Lectures on Empirical Process Theory
Short Course, December 2018
Nankai University
School of Statistics and Data Science

SERVICE

Doctoral Student Supervision

· Yikun Zhang (co-advised with Yen-Chi Chen), Dept. of Statistics, University of Washington, 2022 – Present

Master Student Supervision

· Wenjie Guan, Dept. of Statistics, University of Washington, 2023 – Present

Department of Statistics, University of Washington

· Graduate Admissions Committee for Master's Program, 2021/22, 2022/23, 2023/24
· PhD Prelim Exam Mentor, 2021/22, 2022/23, 2023/24
· Diversity, Equity & Inclusion Committee, 2022/23, 2023/24
· Statistics/ Biostatistics Teaching Working Group, 2023/24
· Popular Science Lecture at UW Math Day for High School Students, March 2023

Department of Statistics, University of Michigan, Ann Arbor

· Mentor for the Undergraduate Research Opportunity Program, Summer 2016
· Organizer of the Graduate Student Seminar Series, 2014/15

Professional

· Treasurer of the ASA Nonparametric Section, 2022/23
· Secretary-elect of the ASA Nonparametric Section, 2023/24

Ad-hoc Reviewer

· Annals of Statistics
· Journal of the Royal Statistical Society: Series B (Statistical Methodology)
· Journal of the American Statistical Association
· Journal of Machine Learning Research
· Bernoulli
· Journal of Econometrics

- Statistica Sinica
- Biometrika
- Electronic Journal of Statistics
- Statistics & Probability Letters
- Journal of Nonparametric Statistics
- Journal of Computational and Graphical Statistics
- Computational Statistics and Data Analysis
- Statistical Methods in Medical Research
- Conference on Neural Information Processing Systems (NeurIPS) 2020, 2021, 2023
- International Conference on Learning Representations (ICLR) 2022, 2024
- International Conference on Artificial Intelligence and Statistics (AISTATS) 2024

PROFESSIONAL MEMBERSHIPS

American Statistical Association

ACADEMIC AWARDS & SCHOLARSHIPS

Scholar of the German National Academic Foundation 2007 – 2013
Studienstiftung des deutschen Volkes

- Statutory Mission: *"To support the university education of young people who, on account of their exceptional academic or artistic talents and their personalities, can be expected to make an outstanding contribution to society as a whole."*

Zempelin Scholarship 2012
Studienstiftung des deutschen Volkes €10,000

- Awarded to support post graduate studies in a PhD program in the US

Graduate Scholarship 2011
Studienstiftung des deutschen Volkes ca. €40,000

- Full tuition fee scholarship and cost of living stipend for pursuing post graduate studies in GB

Hölderlin Scholarship 2009
Studienstiftung des deutschen Volkes €7,500

- Awarded for the purpose of pursuing undergraduate studies in North America

PERSONAL

Nationality
German

Languages
- English (fluent)
- German (native)
- Spanish (elementary)
- French (elementary)

September 30, 2023