

GITTE KREMLING

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🎓 [Google Scholar](#)

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EDUCATION

Ph.D. in Mathematics

Aug 2024

UNIVERSITY OF WISCONSIN-MILWAUKEE, USA

Thesis: “Bootstrap-based goodness-of-fit test for parametric families of conditional distributions”

Supervised by: Gerhard Dikta and Richard Stockbridge

Graduated with highest possible GPA (4.0)

M.Sc. in Applied Mathematics & Computer Science (formerly Technomathematics)

Aug 2019

FH AACHEN UNIVERSITY OF APPLIED SCIENCES, GERMANY

Thesis: “Convergence analysis for multi-level spectral deferred corrections”

Graduated with highest possible GPA (1.0)

B.Sc. in Applied Mathematics & Computer Science (formerly Scientific Programming)

Aug 2017

FH AACHEN UNIVERSITY OF APPLIED SCIENCES, GERMANY

Graduated with highest possible GPA (1.0)

WORK EXPERIENCE

Postdoctoral Researcher

Apr 2025 – present

UNIVERSITY OF HAMBURG, GERMANY

Department of Mathematics, PI: Johannes Lederer

Research Associate

Sep 2022 – Mar 2025

FH AACHEN UNIVERSITY OF APPLIED SCIENCES, GERMANY

Department of Medical Engineering and Technomathematics

Teaching Assistant

Jan 2020 – Jul 2022

UNIVERSITY OF WISCONSIN-MILWAUKEE, USA

Department of Mathematical Sciences

Research Associate

Sep 2017 - Dec 2019

FORSCHUNGSZENTRUM JÜLICH GMBH, GERMANY

Jülich Supercomputing Center, Division Mathematics and Education

Professional Trainee (Mathematical-Technical Software Developer)

Sep 2014 - Aug 2017

FORSCHUNGSZENTRUM JÜLICH GMBH, GERMANY

Jülich Supercomputing Center, Division Communication Systems

PUBLICATIONS AND PREPRINTS

G. Kremling, F. Iafrate, M. Taheri and J. Lederer (2025, under review). Non-asymptotic error bounds for probability flow ODEs under weak log-concavity. Submitted for publication. [arXiv:2510.17608](#)

G. Kremling and G. Dikta (2025, under review). Asymptotic properties of the MLE in distributional regression under random censoring. Submitted for publication. [arXiv:2503.14311](#)

G. Kremling and G. Dikta (2025). Bootstrap-based goodness-of-fit test for parametric families of conditional distributions. *Computational Statistics and Data Analysis*, 215 (to appear in print March 2026), [doi:10.1016/j.csda.2025.108289](#)

G. Kremling and R. Speck (2021). Convergence of multilevel spectral deferred corrections. *Communications in Applied Mathematics and Computational Science*, 16(2), 227-265, [doi:10.2140/camcos.2021.16.227](#)

PUBLISHED SOFTWARE

Kremling, G. (2024). `gofreg`: Bootstrap-Based Goodness-of-Fit Tests for Parametric Regression, R package version 1.0.0. <https://CRAN.R-project.org/package=gofreg>.

PRESENTATIONS

Conference on Mathematics of Machine Learning , Hamburg, Germany (Poster)	Sep 2025
German Probability and Statistics Days , Dresden, Germany (Talk)	Mar 2025
Joint Statistical Meetings , Portland, OR, USA (Talk)	Aug 2024
European Meeting of Statisticians , Warsaw, Poland (Talk)	Jul 2023
German Probability and Statistics Days , Essen, Germany (Poster)	Mar 2023
Graduate Student Colloquium , Department of Mathematical Sciences, University of Wisconsin-Milwaukee, USA (Talks)	Dec 2021 & Apr 2022
International Conference on Scientific Computing and Differential Equations , Innsbruck, Austria (Talk)	Jul 2019

TEACHING EXPERIENCE

As Instructor

Statistical Modeling (graduate course), FH Aachen	Fall 2024
Algebra (Upward Bound Math & Science program), UW-Milwaukee	Summer 2022
Precalculus (Upward Bound Math & Science program), UW-Milwaukee	Summer 2022
Calculus and Analytic Geometry I (undergraduate course), UW-Milwaukee	Spring 2022
Algebraic Literacy I and II (undergraduate course), UW-Milwaukee	Fall 2021
Precalculus (undergraduate course), UW-Milwaukee	Spring 2021
Introduction to College Algebra (undergraduate course), UW-Milwaukee	Fall 2020

As Teaching Assistant

Introduction to Mathematical Thinking and Methods (undergraduate course), Uni Hamburg	Fall 2025
Functional Analysis (graduate course), FH Aachen	Fall 2024
Numerical Methods in Machine Learning (graduate course), FH Aachen	Fall 2024
Bootstrap Methods in Statistics (graduate course), FH Aachen	Spring 2024
Statistical Modeling (graduate course), FH Aachen	Fall 2023
Time Series Analysis and Prognosis (graduate course), FH Aachen	Fall 2023
Numerical Analysis (undergraduate course), FH Aachen	Spring 2019 & 2023
Probability Theory (undergraduate course), FH Aachen	Fall 2019

SERVICE

Member of Faculty Council , Faculty of Mathematics, Informatics and Natural Sciences, University of Hamburg	Oct 2025 – present
Postdoc Network Spokesperson , Hamburg Research Academy	Oct 2025 – present
Volunteer in Scoring Committee , Mathcounts Competition, UW-Milwaukee	Feb 2022

WORKSHOPS AND SUMMER SCHOOLS

- Workshop on Mathematical Data Science**, Black Forest, Germany Jul 2025
Led an open-question session on white-box transformers and contributed to individual and group discussions throughout the workshop
- Mathematical Problems in Industry Workshop**, Worcester, MA, USA Jun 2022
Collaborated with a team to develop innovative approaches for regression analysis of sparse and noisy data
- Graduate Student Mathematical Modeling Camp**, Newark, DE, USA Jun 2022
Contributed to the development of a model for the dynamics of a snowflake in a cloud microphysics framework

HONORS AND AWARDS

- Badge of Honor (M.Sc.)** Aug 2019
FH AACHEN UNIVERSITY OF APPLIED SCIENCES, GERMANY
Awarded to the best 5% of graduates
- Deutschlandstipendium** Sep 2018 - Aug 2019
FH AACHEN UNIVERSITY OF APPLIED SCIENCES, GERMANY
Provides financial and non-material support to high-achieving and committed students
- Badge of Honor (B.Sc.)** Aug 2017
FH AACHEN UNIVERSITY OF APPLIED SCIENCES, GERMANY
Awarded to the best 5% of graduates

PROFESSIONAL MEMBERSHIPS

- American Statistical Association
Caucus for Women in Statistics and Data Science
DMV Fachgruppe Stochastik
Institute of Mathematical Statistics

REFERENCES

- Johannes Lederer**, Postdoctoral Advisor
UNIVERSITY OF HAMBURG, GERMANY
👤 [Homepage](#) ✉ johannes.lederer@uni-hamburg.de
- Gerhard Dikta**, PhD Co-Advisor
FH AACHEN UNIVERSITY OF APPLIED SCIENCES, GERMANY
👤 [Homepage](#) ✉ dikta@fh-aachen.de
- Richard Stockbridge**, PhD Co-Advisor
UNIVERSITY OF WISCONSIN-MILWAUKEE, USA
👤 [Homepage](#) ✉ stockbri@uwm.edu
- Hayley Nathan**, Course Coordinator
UNIVERSITY OF WISCONSIN-MILWAUKEE, USA
👤 [Homepage](#) ✉ henathan@uwm.edu
- Robert Speck**, Master's Thesis Advisor
FORSCHUNGSZENTRUM JÜLICH, GERMANY
👤 [Homepage](#) ✉ r.speck@fz-juelich.de