

Curriculum Vitæ

Personal Data

Name Alexander Ritz
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Education

- 11/2022 – 10/2025 **Applied Mathematics, PhD studies**, Clausthal University of Technology.
- 10/2018 – 09/2021 **Applied Statistics, Master of Science (M.Sc.)**, GPA: 1.3, Georg-August-University Göttingen.
Thesis: The Modeling of Heavy Tails with Deep Transformation Models
Application area: Computer Science
- 10/2013 – 02/2018 **Business Economics, Bachelor of Science (B.Sc.)**, GPA: 2.0, Saarland University.
Specialisation: Statistics und Econometrics

Work experience

- since 11/2022 **Research Fellow**, Clausthal University of Technology, Clausthal-Zellerfeld.
Institute of Mathematics: Working group Applied Statistics and Data Science.
Methodological research und teaching in mathematics, statistics and machine learning.
Teaching: Mathematics for Business Administration and Chemistry I and II (undergraduate)
Probabilistic Deep Learning (postgraduate)
Statistical Methods of Machine Learning (postgraduate)
- 10/2021 – 10/2022 **Biostatistician**, Ruprecht-Karls-University, Heidelberg.
Institute of Medical Biometry: Working group Clinical Studies.
Methodological research and teaching in Biostatistics.
Statistical support of clinical studies and medical research projects.
- 10/2019 – 10/2021 **Research Assistant**, Georg-August-University, Göttingen.
(interruption: Chair of Statistics held by Prof. Dr. Thomas Kneib.
04/2021 – 06/2021) Support of research and teaching in SFA and multivariate panel data.
Statistical programming in order to expand the R package *mgcv*.
- 04/2019 – 10/2019 **Research Assistant**, Georg-August-University, Göttingen.
Chair of Econometrics of Prof. Dr. Helmut Herwartz.
Statistical programming of multivariate time series analysis (R package: *svars*).

- 03/2019 – 10/2019 **Research Assistant**, University Medical Center, Göttingen.
Scientific Core Facility Medical Biometry and Statistical Bioinformatics
Consultation of doctoral students on the topics of biometry und bioinformatics.
- 09/2017 – 09/2018 **Student Assistant**, Saarland University, Saarbrücken.
Instructor at the Education Staff Mathematics led by Dr. Klaus Schindler.
Teaching: Remedial mathematics course of the economics faculty
Mathematics for Economics and Law (undergraduate)
Mathematics C: Dynamic Optimisation (postgraduate)
Mathematics D: Valuation of Financial Derivatives (postgraduate)
- since 09/2012 **Tutoring of university and high school students.**
Self employed as well as charity for students in need.
Offered subjects: Mathematics, Statistics, Econometrics, Economics, Business Administration, Physics, English
- 10/2011 – 09/2012 **Voluntary Civil Service**, Ruth-Schaumann School for the Deaf and Hard of Hearing, Lebach.

Languages

German first language
English C2

UNICERT III-examination passed (Business English)

IT competencies

Deep familiarity with the programming language R
High familiarity with the programming language Python
High familiarity with the document preparation system \LaTeX
Advanced knowledge of common operating systems and applications
Basic Knowledge of SQL, Excel, SAS, SPSS, Statistica and Stata

My Software

Github <https://github.com/alexanderritz>
R package for the construction of copulas: *CopR*
R package for the analysis of „matched pairs data“: *pairedpowR*
Contributions to an R package for multivariate time series analysis: *svars*

Awards

11/2020 Lower Saxony scholarship