

# Curriculum Vitæ

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## Personal Data

Name Alexander Ritz  
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## Education

- since 11/2022 **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 Administration, Bachelor of Science (B.Sc.)**, GPA: 2.0, Saarland University.  
Specialisation: Statistics und Econometrics

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## 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 statistics and machine learning.  
Teaching: Mathematics for Business and Chemistry I (undergraduate)  
Mathematics for Business and Chemistry II (undergraduate)  
Statistical Methods of Machine Learning (postgraduate)  
Data Analysis and Statistical 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.

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## Languages

German first language

English C2

*UNICERT III-examination passed (Business English)*

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## IT competencies

Deep familiarity with the programming language R

High familiarity with the programming language Python

High familiarity with the document preparation system  $\text{\LaTeX}$

Advanced knowledge of common operating systems and applications

Basic Knowledge of SQL, Excel, SAS, SPSS, Statistica and Stata

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## 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*

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## Awards

11/2020 Lower Saxony scholarship