### Christian Hobelsberger

Munich, Germany | linkedin.com/in/christian-hobelsberger | contact: christian.hobelsberger-muc.de Github: christian-hobelsberger

### **EDUCATION**

### LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN (LMU)

Munich, Germany

Master of Science (M.Sc.)

Oct 2023 - Expected July 2026

Statistics and Data Science

### LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN (LMU)

Munich, Germany

Bachelor of Science (B.Sc.)

Oct 2020 - July 2023

Major in Statistics; Minor in Computer Science

GPA: 1.3 (3.7/4.0 American GPA)

Relevant Coursework: Generalized Regression; Linear Models; Introduction to Machine Learning; Calculus 1 & 2

### Gymnasium Munich Moosach

Munich, Germany

GCE A-Levels / Abitur

- June 2020

GPA: 2.0 (3.0/4.0 American GPA)

Exams: mathematics; English; economics; computer science; German

Founder and Head of the school chess club

### **WORK EXPERIENCE**

### TELEFÓNICA GERMANY

Munich, Germany

Data Science Working Student

Jun 2021 - Present

- Developed an application from scratch using Python and the Gitlab API, seamlessly enabling collaboration between teams for over 100 employees
  - Tools used: Python, Gitlab-API, Docker, Gitlab-CI/CD, Scheduler
- Retrained a machine learning model in Python for alarm generation on financially-relevant time series data, resulting in improved aggregation of alarm periods and a clear reduction of false alarms by 33%
  - Tools used: Python, SQL, Microsoft Azure Databricks
- Compiled a large, labeled dataset from various data sources using complex SQL queries, and subsequently implemented automated plausibility checks using cloud computing resources
  - Tools used: Python, SQL, Oracle/Apache Hive Database
- Conducted statistical analysis and tuned the parameters of the STL function for an alarm-generating machine learning model to better detect level shifts

Tools used: Python (statsmodels STL, scikit-learn)

### AFTER-SCHOOL CARE (Gymnasium Munich Moosach)

Munich, Germany

Afternoon caregiver

Jun 2019 – Present

- Professional support for students in grades 5-8 in various subjects
- Management of a weekly chess program that allows students to learn and explore the game of chess

### **VOLUNTEERING & UNIVERSITY PROJECTS**

# IMPACT OF PANDEMIC RESTRICTIONS ON MENTAL HEALTH (BACHELOR THESIS) Apr 2023 - July 2023 github.com/christian-hobelsberger/CTIS-Mental-Health-Restrictions

• Utilized the large dataset (> 500,000 data points) from the Global COVID-19 Trends and Impact Survey in combination with Corona data Germany to examine the impact of pandemic restrictions on mental health during COVID 19 in Germany Tools used: R, LRZ Linux Cluster (computational resources), LaTeX

# MULTIVARIATE ANALYSIS OF CLIMATOLOGICAL AND HYDROLOGICAL LOW WATER DRIVES IN BAVARIA (STATISTICAL INTERNSHIP) Feb 2023 - Apr 2023

github.com/StatPrak-Droughts

- Conducted in-depth analysis of a vast dataset spanning 30 years (1990-2020) from 3 river gauges in hydrological Bavaria
- Developed and implemented Generalized Additive Models (GAMs) with a binomial distribution to predict low water events, employing driver-specific splines and quantile distribution analysis

Tools used: R (Shiny), LRZ Linux Cluster (computational resources), LaTeX

### CTIS MENTAL HEALTH PROJECT

Oct 2022 - Mar 2023

github.com/christian-hobelsberger/CTIS-Seminar

- Utilized the very large dataset (66,000,000 data points) from the Global COVID-19 Trends and Impact Survey to examine the mental health in relation to variables such as age, education level, etc. during the COVID-19 pandemic in R
- Created an interactive R Shiny web app that allows users to view mental health levels over time on world maps or examine the impact of different covariables with more than 100 possible combinations of features Tools used: R (Shiny), LRZ Linux Cluster (computational resources), LaTeX

### ESG DATA SCIENCE DAY - Munich Re

Oct 2022

- Explored the topics of Environmental, Social, and Governance (ESG) and data
- Presented a proposed insurance solution for wind turbine failure in Europe as part of a coding competition at Munich Reinsurance Company

#### PARTICIPATION IN THE "gemeinsam.Brücken.bauen" PROJECT Sep 2021

- Supporting students in closing coronavirus-related learning gaps on behalf of the Bavarian state government
- Lessons in math at the Gymnasium München Moosach during the summer vacations

**TUTOR** June 2018 – Aug 2021

Lessons in math, physics and computer science for high school students which led to improved grades

### **ACTIVITIES**

**CHESS CLUB** Munich, Germany Founder & Manager

gym-muc-moosach.musin.de/faecher/schachklub

Dez 2018 - Present

- Founded the school's own chess club and thus established another space for the intellectual development of the students
- Organized large chess tournaments with over 120 participants
- Won the 3rd place of the munich school chess-team championship 2019 in competition-class 2

### STATISTICS STUDENT COUNCIL (LMU)

Munich, Germany

Financier & elected member

Oct 2020 - Present

fachschaft.statistik.uni-muenchen.de

- Leading financier of the statistics student council
- Managing and administering the finances of the student council and representing the interests of the students

**CHESS COACH** Apr 2019 - Dez 2021

• Teaching chess to kids at my local chess club "Schachfreunde München"

### ADDITIONAL

Technical Skills: Python, R, SQL, Java, LaTeX, Microsoft Office 365, Jira, Azure (Databricks), Github, Gitlab, Tableau Languages: German, English (B2+/C1)

Certifications & Training: Artificial Intelligence Foundations, Tableau Essential Training (2020.1) (LinkedIn) Interests: Member of Mensa in Deutschland e.V. (Association for the highly gifted), Chess, Sailing, Swimming