# Dr. Hendrik Wagenseil

Senior Data Scientist



#### About me

My name is Hendrik Wagenseil, I am 47 years old and live in the city of Nuremberg (Bavaria) close to the Frankenjura. I love all kinds of outdoor activities, whereas my absolute favorites are rock climbing, biking, running and (ski) mountaineering. I also enjoy introducing my three kids Christoph, Johannes and Annika to these activities and volunteer as a climbing and mountaineering instructor for the German Alpine Club since 1996. Me, my wife and my kids enjoy traveling and exploring new places as a family and have been to Sweden, Greece, France and many other countries. This summer, Iceland is our destination.

Besides that, I am a passionate data scientist. Being geographer by education, creating insights from spatial data is my favorite research activity. I have been extensively working with R and all sorts of associated (spatial) packages for data wrangling, data visualization and modeling / machine learning (e.g. data.table, sf, stars, ggplot2, mapview, ranger, caret, etc.). I am keen on exploring new methods and using them to generate understandable and actionable insights from data. Since two years I have been exclusively working on Ubuntu and meanwhile am a big fan of it.

Like most Data Scientists I sometimes use my spare time for coding. The little Shiny application "cdcexplorer" (URL) is an example that I invite you to visit (note that it is hosted on a free web server and may take some time to launch). Code is freely available on my GitHub repo.

I am fluent in English, spreche Deutsch als Muttersprache y puedo hablar un poco de Español.

### My career

- 07/2021 Senior Data Scientist, METER AG, now ADDIUM GmbH.
  - present O Analyse multi-sensor data to improve crop management
    - O Implementation of physical plant growth model into production code
    - O Provision and maintenance of AWS infrastructure for the Data Science team
- 01/2014 Teamlead Geodata Science, GfK Geomarketing GmbH.
- 06/2021 O Managing an inter-disciplinary Data Science team of 8 people
  - O Driving product innovation through exploration and integration of new (IoT) data sources
  - O Developing and implementing (semi-)automated processes for data production
- 09/2006 (Senior) Research Specialist, GfK Geomarketing GmbH.
- 12/2013 Consulting retailers and manufacturers on spatial business questions (e.g. site planning, target group modeling)
  - O Modeling spatial demographics (age, income, spendings) on various scales
- 07/2003 Lecturer and scientific assistant, Institute of Geography, University of 07/2006 Erlangen-Nuremberg.

#### My education

- 2008 PhD / Dr. rer. nat., Institute of Geography, University of Erlangen-Nuremberg.
  - O Thesis: Multispectral and multitemporal image analysis, partial least squares regres-
- 2003 **Diploma**, Institute of Geography, University of Erlangen-Nuremberg.
  - Thesis: NDVI time series, Fourier transformation
  - O Physical geography (major), Geology and Physics (minor)

## My toolset (selection only)

- $> 15 \text{ years } \mathbf{R}.$ 
  - O (Spatial) Data wrangling, analysis and visualization
  - Package development (functional programming, unit and integration testing)
  - O Data modeling and machine learning (ensemble methods, linear models, supervised/unsupervised learning)
- > 3 years **R** Shiny.
  - O Development of Shiny applications, Setting up and hosting of a Shiny server





















