

# Dr. Hendrik Wagenseil

---

*Senior Data Scientist*



---

## About me

My name is Hendrik Wagenseil, I am 48 years old and live in the city of Nuremberg. Privately, 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 (DAV). 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.

Professionally I am a passionate data scientist. Being geographer by education, processing and creating insights from spatial data is my favorite research activity. I also have developed machine learning models in various contexts (predicting consumer behavior, modeling sales performance), worked with physical models on plant growth and time series data and also created multiple interactive applications to create insights from data for non-expert users.

Language-wise 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, shiny, etc.). In the past I also worked a lot with SQL and SAS and just recently started my journey in Python. In general 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 takes a moment to launch it). Code is 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
  - Analysis of multi-sensor data to improve crop management
  - Implementation of physical plant growth model into production code
  - Provision and maintenance of AWS infrastructure for the Data Science team
- 01/2014 – **Teamlead (Geo-)Data Science**, *GfK Geomarketing GmbH*.  
06/2021
  - Driving product innovation through exploration of new (IoT) data sources
  - Developing and implementing (semi-)automated processes for data production
  - Managing an inter-disciplinary Data Science team of up to 8 people
  - GfK Orange Future 2017-2018 (Talentsichtungsprogramm)
  - GfK Leadership training 2014-2015 (Curriculum für Führungskräfte)
- 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)
  - Modeling spatial demographics (age, income, spendings) on various scales
- 07/2003 – **Lecturer and scientific assistant**, *Institute of Geography, University of Erlangen*.  
07/2006

---

## My education

- 2008 **PhD / Dr. rer. nat.**, *Institute of Geography, University of Erlangen*.  
○ Thesis: Multispectral and multitemporal image analysis using PLS regression
- 2003 **Diploma**, *Institute of Geography, University of Erlangen*.  
○ Thesis: NDVI time series, Fourier transformation  
○ Physical geography (major), Geology and Physics (minor)

---

## My toolset (selection only)

- > 15 years **R**.  
○ (Spatial) Data wrangling, analysis and visualization  
○ Package development (functional programming, unit and integration testing)  
○ Data modeling and machine learning (ensemble methods, linear models, supervised/unsupervised learning)
- > 3 years **R Shiny**.  
○ Development of Shiny applications, Setting up and hosting of a Shiny server
- > 8 years **Leadership**.  
○ Managing international and inter-disciplinary Data Science teams

