

Online Workshop

Text Mining in R

Organizational details

Instructor:	Prof. Dr. Nicolas Pröllochs
Date:	13.09.2021, 10:00 am – 4:00 pm
Location:	Cisco Webex
ECTS:	1

To gain the ECTS, participants have to:

- Read introductory literature
- Actively participate during the workshop
- Perform in-class exercises

Max. number of participants: 12

Objectives

The **main objectives of this course** are:

- 1) **Understand the basic concepts of text mining** and its **real-world relevance**
- 2) Gain an **overview** of different **methods, algorithms, and software tools** for **extracting knowledge from unstructured text data**
- 3) **Practice the implementation** of text mining applications **in R**.

Content & methods

The digital age has ignited a burst in the volume of textual materials available to the public. Common examples include blog entries, posts on social media platforms, user-generated reviews, descriptions in recommender systems, and product advertisements in electronic commerce. Text mining provides computational techniques to derive actionable insights from such unstructured data sources.

The **workshop on “Text Mining in R”** provides participants with **an overview of a wide range of text mining methods**, including exploratory text analysis and lexicon-based sentiment analysis. At the end of the course, participants will be familiar with the most important concepts, principles, and algorithms in text mining. The course focuses on the **practical implementation of text mining in R**.

Target group

Target group: Doctoral candidates and postdoctoral researchers at GGS

Participation requirements: Participants of the workshop should have basic experience with R (e.g., data import, data manipulation). All relevant background knowledge can be acquired from the open-source book “R for Data Science” by Hadley Wickham (<http://r4ds.had.co.nz/>).

Course language

English (German, if only German participants)

Please note: As this is not an English language course, proficiency in English at the C1 level of competency is required

Requirements for ECTS credits

- Before the workshop: Read introductory materials on data import and data manipulation in R (Section 10-15 in the book “R for Data Science” by Hadley Wickham (<https://r4ds.had.co.nz/>))
- Before the workshop: Download and install R & R-Studio (free to use)
- Actively participate during the workshop and perform in-class exercises in R

About the instructor

Nicolas Pröllochs is a Tenure-Track Professor in Data Science and Digitization at the Faculty of Economics and Business Studies of the University of Giessen. Before joining the University of Giessen, he worked as a postdoctoral researcher in machine learning at the Department of Engineering Science of the University of Oxford. His research focuses on data science methods and computational techniques for understanding and predicting human decision-making in the digital age. Current research projects apply machine learning and natural language processing to a broad selection of topics, including social networks, recommender systems, and financial markets. Apart from academic research, he is a passionate programmer and has developed multiple widely used R packages for machine learning and text mining.

Registration

By **September 3, 2021** via e-mail at info@ggs.uni-giessen.de.