Fachbereich 9 - Medienstudiengänge
Department 9 - Media Courses

Kommentar zur Lehrveranstaltung im SoSe 2023
Description of seminars

Veranstalter*in: *Lecturer:*	Dr. Jonas Rieger
Titel (dt.):	Einführung in Topic Modelle
Titel (engl.): (immer angeben)	Introduction to topic modeling

Beschreibung:
Description:

Topic modeling includes many different algorithms that automatically identify latent structures from a large amount of text data. They can be used for a variety of purposes, such as exploration of a dataset through dimension reduction. In this way, topic models make the mass of texts that would not be manually processable feasible to process at all. In addition, topic models are used to generate hypotheses or to find answers for those (cf., Chen et al. 2023).

This seminar is method-oriented, i.e., a number of different topic models and their advantages and disadvantages in specific use cases are presented. Using an appropriate R package, such as *rtweet* (Kearney 2019), students will be able to collect data based on their own research question and process it using the learned methodologies.

The objective of the seminar is to enable students to properly apply topic models to relevant questions related to content analysis (cf., Grimmer and Stewart 2013, Grimmer et al. 2022) by explaining how topic models work and critically handling the obtained model results.

An interest in news and journalism and a basic knowledge of R and statistical techniques are recommended for meaningful participation.

Successful participation is achieved through active participation in the block sessions and the development of an own research question based on Twitter data (in teams of two). There is also the possibility to elaborate the project for a written term paper (examination performance).

Literatur:
Literature:

Chen, Y., Z. Peng, S.-H. Kim and C. W. Choi (2023). "What We Can Do and Cannot Do with Topic Modeling: A Systematic Review". In: Communication Methods and Measures. https://doi.org/10.1080/19312458.2023.2167965.
Grimmer, J. and B. M. Stewart (2013). "Text as Data: The Promise and Pitfalls of Automatic Content Analysis Methods for Political Texts". In: Political Analysis 21.3, pp. 267–297. https://doi.org/10.1093/pan/mps028.
Grimmer, J., M. E. Roberts and B. M. Stewart (2022). "Text as data: A new framework for machine learning and the social sciences." Princeton University Press.
Kearney, M. W. (2019). "rtweet: Collecting and analyzing Twitter data". In: Journal of Open Source Software 4.42 p. 1829. https://doi.org/10.21105/joss.01829.