

Big Data and Social Science

Objective

By the end of the course participants will:

- have a good understanding of commonalities and differences between the techniques used in the social sciences and those used in computer science;
- have seen examples of what can be done with techniques from other disciplines;
- know about research that integrates survey data with other data sources;
- have a solid basis for self-study with the Foster et al. textbook “Big Data and Social Science”.

Description

Social scientists and survey researchers are increasingly faced with integrating data from multiple data sources and are expanding their activities beyond experiments and surveys.

This course will discuss these developments and provide practical guidance on combining methods and tools from computer science, statistics, and social science.

In particular techniques such as data based management and machine learning applications will be discussed, but also the linkage of various records, and privacy issues and questions around informed consent.

The course presents the key big data tools in a non-intimidating way to social and data scientists while not neglecting research questions and purposes.

The course aims to illustrate social science and data science principles through real-world applications, and links computer science concepts to real social science as well as survey research.

Portions of the course are based on parts of a recent textbook with the same title. Data and code to practice will be available on GitHub.

Methodology

The course covers:

- Background to Research Questions and Inference in the Social Sciences
- Data Capture and Curation
- Modelling and Analysis
- Information Visualization
- Privacy and Ethics

Organizational Information

Language	English
Target group	Doctoral Candidates at all stages and Postdocs from Social Sciences
Date	Monday, 3 June 2019, 10:00 – 17:00 Tuesday, 4 June 2019, 10:00 – 13:00
Registration	For registration click here

Trainer



Prof. Dr. Frauke Kreuter

Frauke Kreuter is Professor in the Joint Program in Survey Methodology at the University of Maryland, Professor of Methods and Statistics at the University of Mannheim, and head of the statistical methods group at the German Institute for Employment Research in Nuremberg.

Previously, she held positions in the Department of Statistics at the University of California, Los Angeles, and the Department of Statistics at the Ludwig Maximilian's University of Munich.

Prof. Kreuter serves on several advisory boards for National Statistical Institutes around the world, and within the Federal Statistical System in the United States. She is also a Gertrude Cox Award winner, which recognizes statisticians in early- to mid-career who have made significant breakthroughs in statistical practice, winner of the inaugural Links Lecture Award and elected fellow of the American Statistical Association.

Additionally, she is co-founder of the Coleridge Initiative, founder of the International Program in Survey and Data Science, and co-host of the digitalization podcast www.digdeep.de