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

<table>
<thead>
<tr>
<th>Language</th>
<th>English</th>
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<tbody>
<tr>
<td>Target group</td>
<td>Doctoral Candidates at all stages from Social Sciences</td>
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| Date       | Monday, 3 June 2019, 10:00 – 17:00  
Tuesday, 4 June 2019, 10:00 – 13:00 |
| Registration | For registration click here |