CoVIS: CoCreating a Visualisation Information System

Kurztext

A computational social science project that applies advanced visualization and machine learning techniques to empower social scientists while exploring novel ways of user-centered design and participation (Masterprofil: DMI & KIKR).

Betreuende

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Kurzbeschreibung des Themas

Computational Social Science is an umbrella term for the adoption of computational methods by social scientists. The collaboration between social sciences and computer science opens up unprecedented opportunities for social scientists to understand complex systems. Lazer et al. characterized computational social science as a field that leverages the capacity to collect and analyze data at a scale to examine patterns of individual and group behaviors and to enhance our understanding of individuals and collectives. The student project will allow you to learn about the questions and methods of social scientists. You can specialize yourself in a broad range of topics, including the emerging field of computational social science, user-centered design, user experience design, co-creation, interaction design, visualization, and machine learning.

Our goal is to empower social scientists to understand complex problems, e.g. the global dynamics of social policy and cross-national interdependencies. Our research group is currently building the first information system that gives a holistic picture of the global welfare state: a next-generation atlas with sophisticated visualization and machine learning capabilities. This means that we have access to a large group of social scientists, which gives you the chance to work on exciting real-world problems with some of the leading experts in sociology. In addition to this unique opportunity to actively contribute to the ongoing computational social science research at the University of Bremen, you are completely free to work on your individual computational social science questions.

In the project, you will learn how to formulate computational social science research questions, identify and analyze user requirements, and design and develop visualization and machine learning models. We follow a research-oriented learning paradigm, i.e. the project is self-organized, which means that you as the participants will not only learn about research in computational social science but also gain experience in managing a long-term project.

begleitende LVs:

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