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WHAT-IF: WHat-if: Advanced Simulations for Testing the Effect of the Information Environment on the Functioning of Democracy

Description

The rapidly evolving political information environment poses significant challenges to democratic citizenship through e.g. the spread of disinformation, rise of hate speech, and lack of cross-cutting information. Methodological challenges, including proprietary data, limited external validity of experiments, and the inability to use societies as experimental playgrounds, hinder our ability to comprehensively understand the impact of interventions and regulations in improving the quality of democratic discourse.

WHAT-IF aims to develop and critically assess an empirically grounded simulation functioning as a digital twin of the digital political information environment. This WHAT-IF machine can be used to test the effects of potential policy and regulatory interventions on democratic citizenship, offering a tool for evidence-based policy making in the realm of (social) media quality and regulation.

Our innovative approach combines data donation, Agent-Based Modeling and Large Language Models to create the simulation. It is validated using immersive virtual field experiments and by modeling 'what-if' scenarios based on proposed policy interventions and regulation. Co-creation with stakeholders including policy makers and citizens ensures close alignment with their needs. Finally, a critical analysis of the whole empirical chain will give insight into the desirability and legal feasibility of datafication and simulation of the political information environment.

Our insights into the role of the political information environment in shaping democratic citizenship will contribute to effective (social) media regulation and interventions. We will significantly contribute to novel Computational Social Science methods: we will integrate advanced AI tools with existing modeling approaches, and use respondent-centered data collection and synthetic data methods to harmonize CCS research with GDPR and other regulations.

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