

Title	Description	Supervisor
<p>1. (De)polarization on online platforms</p>	<p>Research and public media alike observe an increase in polarization and aggressiveness in discussions on online platforms (Waller and Anderson 2021). Research suspects that this may be driven by an echo chamber effect, wherein individuals tend to interact with people holding similar opinions to oneself on online platforms (Van Alstyne and Brynjolfsson 2005). This could lower the awareness and acceptance of other opinions, eventually leading to polarized and more aggressive discussions. This is particularly problematic because it may reduce the quality of discussions, considering only selected arguments and opinions, and also diminish participants' well-being when interacting in a polarized and aggressive environment.</p> <p>Against this backdrop, you are asked to provide a literature review on polarization on online platforms as well as potential ways of depolarization.</p> <p>References</p> <p>Van Alstyne, M., and Brynjolfsson, E. 2005. "Global Village or Cyber-Balkans? Modeling and Measuring the Integration of Electronic Communities," <i>Management Science</i> (51:6), pp. 851–868. (https://doi.org/10.1287/mnsc.1050.0363).</p> <p>Waller, I., and Anderson, A. 2021. "Quantifying Social Organization and Political Polarization in Online Platforms," <i>Nature</i> (600:7888), pp. 264–268. (https://doi.org/10.1038/s41586-021-04167-x).</p>	<p>Jan Schilpp</p>
<p>2. Simulated data in quantitative empirical research</p>	<p>Data collection for quantitative empirical research is highly resource consuming. Simulated data might be a promising alternative offering rich data access at low cost. For instance, it might be possible to leverage large language models to simulate human behavior. These models are trained to emulate human behavior and serve as computational models of human interaction. Consequently, they might provide a viable avenue for conducting pilot studies through simulation in the realm of social interaction (Horton 2023).</p> <p>Against this backdrop, you are asked to provide a literature review on how simulated data is used in quantitative empirical research.</p> <p>Reference</p> <p>Horton, J. J. 2023. Large Language Models as Simulated Economic Agents: What Can We Learn from Homo Silicus?, <i>arXiv</i>. (https://doi.org/10.48550/arXiv.2301.07543).</p>	<p>Jan Schilpp</p>

Title	Description	Supervisor
<p>3. How the use of AI influences people's perceptions of organizations</p>	<p>The use of AI by organisations in various domains, such as advertising, is widespread. How people perceive organisations that use AI is therefore an on-going and important area of research. For example, research has shown that consumers respond less negatively to companies if an error was caused by an AI (vs. human) (Srinivasan & Sarial-Abi, 2021). In your seminar, you should provide a literature review on how the use of AI influences consumers' perceptions of organisations.</p> <p>Srinivasan, Raji, and Gülen Sarial-Abi. "When algorithms fail: Consumers' responses to brand harm crises caused by algorithm errors." <i>Journal of Marketing</i> 85.5 (2021): 74-91.</p>	<p>Prof. Hartmut Höhle</p>
<p>4. AI content moderation in online communities</p>	<p>As people participate in online communities, such as Reddit, Stack Exchange, or Wikipedia, their encounters with these communities are increasingly shaped by AI. For example, many Subreddits on the content-sharing site Reddit use AI to automatically flag and delete content that violates community norms. In your seminar, you should provide a literature review on how AI influences the content moderation in online communities.</p>	<p>Prof. Hartmut Höhle</p>
<p>5. Effects of explainable AI on user responses</p>	<p>Due to upcoming regulative initiatives and the ongoing diffusion of AI-based systems throughout society, research on explainable AI has gained increased attention (Meske et al. 2022). However, existing research has outlined contradicting effects of explainability on users' responses towards AI-based decisions (Poursabzi-Sangdeh et al. 2021).</p> <p>Within the seminar thesis you are asked to conduct a literature review to shed light on positive and negative effects of explainability on users' responses towards AI-based decisions.</p> <p>References</p>	<p>Prof. Hartmut Höhle</p>

Title	Description	Supervisor
	<p>Meske, C., Bunde, E., Schneider, J., and Gersch, M. 2022. "Explainable Artificial Intelligence: Objectives, Stakeholders, and Future Research Opportunities," <i>Information Systems Management</i> (39:1), pp. 53–63.</p> <p>Poursabzi-Sangdeh, F., Goldstein, D. G., Hofman, J. M., Wortman Vaughan, J. W., and Wallach, H. 2021. "Manipulating and Measuring Model Interpretability," in <i>Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems</i>, pp. 1–52.</p>	
<p>6. Agile software development methods</p>	<p>Agile software development methods have long been used to foster regular customer contact and frequently update software requirements. In doing so, agile methods facilitate shorter iterations and a better fit of product features with customer expectations. However, not everybody is happy with agile development methods. In fact, the constant feedback and need to reorient towards changing goals has often been criticized as an aspect of agile development that puts pressure on developers and adds to their stress. At a team level, prior work has argued that agile methods help to execute beneficial team processes. Specifically, planning-oriented practices and action-oriented practices have been shown to help manage requirements volatility in software development teams.</p> <p>This thesis project aims to go deeper than prior work in order to better understand how agile practices help deal with different facets of requirements volatility and what outcomes the practices have on individuals and teams.</p>	<p>Prof. Hartmut Höhle</p>