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Understanding and Mitigating Algorithm Aversion in Human-AI Decision-Making

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Language: German or English

Motivation:

As artificial intelligence (AI) systems become increasingly integrated into decision-making processes across domains, from healthcare to finance and HR, there remains a persistent reluctance among individuals to trust or rely on algorithmic recommendations, even when such systems demonstrate similar or even superior performance compared to human judgment. This phenomenon, known as *algorithm aversion*, poses a critical challenge to the effective adoption of AI in organizational settings. Understanding the psychological, contextual, and design factors that influence this aversion is essential for aligning human-AI collaboration with optimal decision outcomes.

Goal:

The objective of this thesis is to explore the concept of algorithm aversion, with a focus on its impact on human-AI decision-making collaborations. Specifically, the thesis will aim to define and contextualize algorithm aversion through a review of interdisciplinary literature, identify key psychological and situational factors that influence the acceptance of algorithmic advice, and propose and discuss an experimental design for mitigating algorithm aversion in decision-making. By advancing a deeper understanding of when and why users reject or accept algorithmic input, this research intends to contribute to the design of AI-enabled systems that foster trust and improve decision quality.

References and Related Literature:

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Dietvorst, B. J., Simmons, J. P., & Massey, C. (2015). Algorithm aversion: people erroneously avoid algorithms after seeing them err. *Journal of experimental psychology: General, 144*(1), 114.

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