

HCI-outcomes of AI-based decision support in an economic decision task

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1 Project

AI has the potential to support human decision making in everyday situations. However, in sensitive areas, most state-of-the-art algorithms face several challenges, such as algorithmic accountability, ethical considerations, and user acceptance. How should human and machine judgment be combined to tackle these challenges [5]? Should we work on more explainable AI-systems [4]? Should we simplify algorithmic decision support, which could also make algorithms more robust against uncertain environments [3]? Or should we search for an efficient interaction between human and machine, where the prior controls the output of the latter [1]? In collaboration with the student, we will conduct an experiment (e.g., [2]), to explore the interplay between human and AI-based decisions. By doing that, we could compare diverse AI-algorithms (e.g., CNN, Logistic Regression, Decision Tree) or decision environments (e.g., risk vs. uncertainty) in regard to diverse human-machine interaction outcomes, such as performance, comfort, and acceptance. This study could serve as a preparation for a prospective Master’s thesis.

2 Contact / Supervision

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References

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