UNIVERSITÄT GRAZ
UNIVERSITY OF GRAZ
Department of Economics

Host: Univ.-Prof. Dr. Maik Schneider

INVITATION

Prof. Dr. Sebastian Fehrler
(Uni Bremen)

On the topic:

"Similarity and Consistency in Algorithm-Guided Exploration "

In decision-making scenarios that involve a trade-off between exploration and exploitation, individuals often seek guidance from either fellow humans or algorithms. The propensity to heed algorithmic advice depends on the characteristics of the algorithm itself and the preferences of the individual receiving the advice. In an online experimental setup, we investigate whether individuals' inclination to follow the recommendations of a reinforcement learning algorithm correlates with the alignment of exploration preferences between humans and algorithms. To do so, we manipulate the weight assigned by the algorithm to exploration relative to exploitation and simulate participants' decision-making processes using a learning model similar to the algorithm's. Our findings indicate that, all else being equal, individuals are more inclined to heed the advice of exploitative, consistent algorithms. This inclination may stem from humans interpreting algorithmic consistency as an indicator of competency. In contrast, the degree of similarity between human and algorithm preferences explains little of the observed variation in the willingness to follow algorithmic advice.

Date: May 14, 2024
Starting time: 4.45 p.m.
Location: HS 111.21/Beethovenstraße 8/2

All professors, lecturers, assistants and students are cordially invited to this lecture!