

Towards Choice Engineering

Shaping human and animal behavior is both practically and theoretically important. Inspired by engineering's success in natural sciences, we ask whether quantitative models can outperform qualitative psychological principles in this task, a concept we call "choice engineering". To test this, we ran a competition where teams designed reward schedules using either quantitative models or qualitative principles to bias choices in a two-alternative task. Results showed that choice engineering was the most effective method, demonstrating that quantitative models are ready to be used for behavior shaping. Additionally, choice engineering offers a novel way to compare cognitive models, beyond traditional statistical methods.

Primary author: LOEWENSTEIN, Yonatan (The Edmond and Lily Safra Center for Brain Sciences, The Hebrew University of Jerusalem, Jerusalem, Israel; The Alexander Silberman Institute of Life Sciences, Dept. of Cognitive and Brain Sciences and The Federmann Center for the Study of Rationality, The Hebrew University of Jerusalem, Jerusalem, Israel)

Presenter: LOEWENSTEIN, Yonatan (The Edmond and Lily Safra Center for Brain Sciences, The Hebrew University of Jerusalem, Jerusalem, Israel; The Alexander Silberman Institute of Life Sciences, Dept. of Cognitive and Brain Sciences and The Federmann Center for the Study of Rationality, The Hebrew University of Jerusalem, Jerusalem, Israel)

Session Classification: Guest Talk