



ELLIS talk

# Fair Recommendations with Biased Data

**Thorsten Joachims**

Cornell University

Host: Marco Mondelli

Search engines and recommender systems have become the dominant matchmaker for a wide range of human endeavors -- from online retail to finding romantic partners. Consequently, they carry substantial power in shaping markets and allocating opportunity to the participants. In this talk, I will discuss how the machine learning algorithms underlying these system can produce unfair ranking policies for both exogenous and endogenous reasons. Exogenous reasons often manifest themselves as biases in the training data, which then get reflected in the learned ranking policy and lead to rich-get-richer dynamics. But even when trained with unbiased data, reasons endogenous to the algorithms can lead to unfair or undesirable allocation of opportunity. To overcome these challenges, I will present new machine learning algorithms that directly address both endogenous and exogenous unfairness.

**Wednesday, December 1, 2021 04:00pm - 06:00pm**

Zoom: <https://istaustria.zoom.us/j/92105664264?pwd=UG1icDk0Ym9GYldZZW41VWlOT0JhUT09>

Meeting ID: 921 0566 4264 Passcode: 715403



This invitation is valid as a ticket for the ISTA Shuttle from and to Heiligenstadt Station.

Please find a schedule of the ISTA Shuttle on our webpage:

<https://ista.ac.at/en/campus/how-to-get-here/> The ISTA Shuttle bus is marked ISTA Shuttle (#142) and has the Institute Logo printed on the side.

[www.ista.ac.at](http://www.ista.ac.at) | Institute of Science and Technology Austria | Am Campus 1 | 3400 Klosterneuburg