



CRML Distinguished Lecture Series:

Thorsten Joachims

Professor of Computer Science, Cornell University

Fair Recommendations with Biased Data

Friday, May 7, 2021 | 1:00 PM | Virtual Lecture / Free

Registration: https://ucsb.zoom.us/webinar/register/WN_20MjAeHfTuaFtUefZPTaM



Abstract: 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.

Biography: Thorsten Joachims is a Professor in the Department of Computer Science and in the Department of Information Science at Cornell University, and he is an Amazon Scholar. His research interests center on a synthesis of theory and system building in machine learning, with applications in information access, language technology, and recommendation. His past research focused on counterfactual and causal inference, learning to rank, structured output prediction, support vector machines, text classification, learning with preferences, and learning from implicit feedback. He is an ACM Fellow, AAAI Fellow, KDD Innovations Award recipient, and member of the SIGIR Academy.