

# How Status and Reputation Shape Human Evaluations: Consequences for Recommender Systems

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## ABSTRACT

Recommender systems are inherently driven by evaluations and reviews provided by the users of these systems. Understanding ways in which users form judgments and produce evaluations can provide insights for modern recommendation systems. Many on-line social applications include mechanisms for users to express evaluations of one another, or of the content they create. In a variety of domains, mechanisms for evaluation allow one user to say whether he or she trusts another user, or likes the content they produced, or wants to confer special levels of authority or responsibility on them. We investigate a number of fundamental ways in which user and item characteristics affect the evaluations in online settings. For example, evaluations are not unidimensional but include multiple aspects that all together contribute to user's overall rating. We investigate methods for modeling attitudes and attributes from online reviews that help us better understand user's individual preferences. We also examine how to create a composite description of evaluations that accurately reflects some type of cumulative opinion of a community. Natural applications of these investigations include predicting the evaluation outcomes based on user characteristics and to estimate the chance of a favorable overall evaluation from a group knowing only the attributes of the group's members, but not their expressed opinions.

## Categories and Subject Descriptors

H.3.3 Information Search and Retrieval – *Information filtering*

## Keywords

Social recommender systems

## BIO

Jure Leskovec is assistant professor of Computer Science at Stanford University. His research focuses on mining large social and information networks. Problems he investigates are motivated by large scale data, the Web and on-line media. This research has won several awards including best paper awards at KDD, WSDM, ICDM, ACM KDD dissertation award, Microsoft Research Faculty Fellowship, as well as Alfred P. Sloan Fellowship. Jure received his bachelor's degree in computer science from University of Ljubljana, Slovenia, Ph.D. in machine learning from the Carnegie Mellon University and postdoctoral training at Cornell University. You can follow him on Twitter @jure.