Invited Talk Using trust networks to improve data quality and recommendations

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Abstract

The boom in social computing has left us with large amounts of information, some of it from automated sensors and some from humans, most of it incomplete, inconsistent, wrong and/or stale. Doctorow noticed that people are lazy, dumb, and at times deceitful, but we still want to use their data rather than none. We will introduce the related notions of Reputation, Trust, Confidence and Reliability, and will show how they can be used to improve the quality of data and of recommendations. We will pay special attention to explicit record of trust relationships among agents (human and otherwise), illustrate its usage with some ongoing recommender system projects, and highlight recent advances in trust aging.