

From Implicit Data to Cognitive Models for Recommender Systems

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Abstract

The past decade in recommender systems has been dominated by the usage of implicit signals to infer latent user features. The advantage being that implicit signals are readily available and in large quantities. However, such modeling is purely behavioural and lacks depth in order to understand the cognitive reasoning behind user choices and preferences. In this talk I will demonstrate how cognitive models, inspired from psychology, can be beneficial for various challenges in recommender systems, from the cold start problem, through context-aware recommendations to explanations.

Speaker Bio

Marko Tkalčič is associate professor at the Faculty of Mathematics, Natural Sciences and Information Technologies (FAMNIT) at the University of Primorska in Koper, Slovenia. He aims at improving personalized services (e.g. recommender systems) through the usage of psychological models in personalization algorithms. To achieve this, he uses diverse research methodologies, including data mining, machine learning, and user studies. More info at <http://markotkalcic.com/>.

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