

# Keynote: A pragmatic and industry-aware approach toward the design of on-line recommender systems

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## Abstract

On-line recommender systems are designed to address a number of different recommendation scenarios in which traditional systems fail primarily, but not only, due to scalability issues.

The goal of this talk is to give participants an overview on the design requirements for on-line recommender systems, with a focus on their quality evaluation, and to provide pragmatic guidelines to perform these activities more effectively avoiding common pitfalls.

The talk is structured into two parts. In the first part, after a general overview of on-line recommender systems, we will analyze different application scenarios. In the second part we will analyze possible functional and non-functional evaluation problems. We will present some of our works on evaluating presentation biases, problems which affect click-based on-line recommender systems. We will later present some of our recent work towards comparing the scalability of different Top-N recommender systems, understanding their fundamental limitations and characteristics for some of the application scenarios identified in the first part.