

CALL FOR PAPERS

UMUAI: Special Issue on Session-based and Sequential Recommender Systems

USER MODELING AND USER-ADAPTED INTERACTION:
The Journal of Personalization Research (UMUAI)



Abstracts due: **November 18, 2018**, paper submission deadline: **March 10, 2019**,
UMUAI Website: <http://www.umuai.org>, Journal Impact Factor: **2.9**

BACKGROUND AND SCOPE

In many application domains of recommender systems, it is highly important to consider the sequential order of past actions of a user in the recommendation process. For example, in e-commerce settings, it is often necessary to take the last few actions of a customer into account to understand their short-term shopping intents. Similarly, in music or video streaming applications, next-item or similar-item recommendations should match the user's ongoing listening or viewing session to provide a satisfying user experience. Besides such often purely session-based recommendation scenarios, there are, however, also domains where the user's longer-term interests have to be considered as well. The sequential recommendation of a Point-of-Interest (POI) to visit next during a trip, for example, should not only be based on the users' current location or very last check-in at a POI, but also on their general traveling interests.

The described types of sequence-aware recommenders are usually based on sequential models, which are learned from time-ordered logs of user actions (e.g., item viewing or listening events, purchases, or user check-ins in social networks). However, these sequential logs not only allow to create models to adapt the recommendations to the user's current context; they also contain additional behavioural patterns that can be leveraged in the recommendation process. They, for example, allow to detect short-term popularity trends in the community and to learn repeated item purchase or consumption patterns. Such patterns have already been used in the literature to further improve the recommendations or to extend the scope of recommenders to reminders.

In recent years, we have observed an increased interest in session-based and sequential recommendation problems, which are highly relevant in practice but were underexplored in the academic literature for a long time. **The goal of the special issue is to consolidate the current state of the art in the area and to report on recent advances in the areas of session-based and sequential recommendations.**

GUEST EDITORS / CONTACT

Dietmar Jannach, AAU Klagenfurt, Austria, dietmar.jannach@aau.at (main contact)
Bamshad Mobasher, DePaul University, USA, mobasher@cs.depaul.edu
Shlomo Berkovsky, Atlassian, Australia, shlomo.berkovsky@gmail.com

TOPICS

- Session-based next-item recommendation with and without long-term user models
- Combination of short- and long-term profiles
- Sequential recommendation problems, e.g., for the problems of
 - next-basket recommendation or
 - next-POI recommendation
- Detection of information exploration patterns and other navigation patterns
- Repeated item recommendation and reminders
- Detection and consideration of community trends
- Recommendation of sequences, e.g., in the areas of
 - itinerary recommendation or
 - learning course recommendation
- Stream-based recommendation, e.g., for news feeds
- Session-based similar item recommendation
- Sequential recommendations for groups
- Serendipity and diversity in sequential recommendations
- User interaction with sequential and session-based recommenders
- Trust, emotions, and personality and their impact on sequential recommendations
- Application papers, e.g., in the areas of
 - next-track music recommendation and playlist continuation,
 - streaming video recommendation,
 - web browsing prediction, or
 - next-item recommendation in e-commerce
- User studies, field studies, in-depth experimental offline evaluations
- Methodological aspects (evaluation protocols, metrics, and data sets)

PAPER SUBMISSION & REVIEW PROCESS

Submissions will be pre-screened for topical fit based on extended abstracts. Extended abstracts (up to three pages in journal format) should be sent to dietmar.jannach@aau.at. Detailed instructions for paper submissions and updates will be posted at <https://tinyurl.com/UmuaiSISessions2018>

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| • November 18, 2018 | Abstract submission |
| • December 10, 2018 | Author notification (abstracts) |
| • March 10, 2019 | Full paper submission |
| • June 14, 2019 | Author notification |
| • August 18, 2019 | Revised versions due |
| • October 21, 2019 | Final notification |
| • November 24, 2019 | Camera-ready version due |
| • Spring 2020 | Publication of special issue |

