

KDD 2021 Workshop on Online and Adaptive Recommender System (OARS)

Call For Papers

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KDD OARS is a full day workshop taking place on Aug 14-18th, 2021 in conjunction with KDD 2021 in Singapore.

Workshop website: <https://oars-workshop.github.io/>

Important Dates:

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- Submissions Due - May 20th, 2021
- Notification - June 10th, 2021
- Camera Ready Version of Papers Due - August 1st, 2021
- KDD OARS Full day Workshop - August 14-18th, 2021

Details:

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The KDD workshop on online and adaptive recommender systems (OARS) will serve as a platform for publication and discussion of OARS. This workshop will bring together practitioners and researchers from academia and industry, to discuss the challenges and approaches to implement OARS algorithms and systems and improve user experience by better modeling and responding to user intent.

Many recommender systems deployed in the real world rely on categorical user-profiles and/or pre-calculated recommendation actions that stay static during a user session. Recent trends suggest that recommender systems should model user intent in real time and constantly adapt to meet user needs at the moment or change user behavior in situ. In addition, various techniques have been proposed to help recommender systems adapt to new users, items, or behaviors. Some strategies to build “adaptive” recommenders include:

- Systems for online training, e.g. updating the parameters of a pre-trained model to a new user.
- Feature-based systems that handle cold-start scenarios, and can gracefully adapt to a combination of cold- and warm users/items.
- Systems that avoid modeling users at all (e.g. session-based recommenders that directly learn from item interactions without needing user terms)
- Systems that adapt to new behaviors through RL or other adaptive learning algorithms.

We invite submission of papers and posters of two to ten pages (including references), representing original research, preliminary research results, proposals for new work, and position and opinion papers. All submitted papers and posters will be single-blind and will be peer reviewed by an international program committee of researchers of high repute. Accepted submissions will be presented at the workshop.

Topics of interest include, but are not limited to:

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Novel algorithms and paradigms

- online and adaptive neural recommender
- reinforcement learning (on-policy, off-policy, offline RL, and other relevant subfields)
- online/streaming learning
- interactive and conversational recommender
- extreme classification
- graph recommender

Applications

- product recommendation
- content recommendation
- ads recommendation
- fashion and decor recommendation
- job recommendation
- intervention/behavior change/healthy life-style recommendation

User modeling and representations

- implicit and explicit user intent modeling
- dynamic user intent modeling
- visual/style/taste modeling
- combination of in-session intent with long term user interest
- incorporation of knowledge graph
- representation learning

Architecture and Infrastructure

- scalability of neural methods for large scale real-time recommendations
- streaming and event-driven processing infrastructures

Evaluation and explanation methodologies

- evaluation, comparison, explanation of OARS for a recommendation task
- off-policy and counterfactual evaluation

Social and user impact

- UX for OARS
- welfare and objectives of OARS (CTR, dwell-time, diversity, multi-objectives, long term objectives)
- privacy and ethics considerations

Submission Instructions:

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All papers will be peer reviewed (single-blind) by the program committee and judged by their relevance to the workshop, especially to the main themes identified above, and their potential to generate discussion.

All submissions must be formatted according to the ACM template guidelines

<https://www.acm.org/publications/proceedings-template>

Submissions must describe work that is not previously published, not accepted for publication elsewhere, and not currently under review elsewhere. All submissions must be in English.

Please note that at least one of the authors of each accepted paper must register for the workshop and attend the online session to present the paper during the workshop.

Submissions to KDD OARS workshop should be made at <https://easychair.org/my/conference?conf=oarskdd2021>

ORGANIZERS:

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Xiquan Cui	The Home Depot, USA
Estelle Afshar	The Home Depot, USA
Khalifeh Al-Jadda	The Home Depot, USA
Srijan Kumar	Georgia Institute of Technology, USA
Julian McAuley	UCSD, USA
Kamelia Aryafar	Google Inc, USA
Vachik Dave	Walmart Labs, USA
Mohammad Korayem	CareerBuilder, Canada
Tao Ye	Amazon, USA

Contact: Please direct all your queries to xiquan_cui@homedepot.com for help.