Reflections on Recommender Systems: Past, Present, and Future (INTROSPECTIVES)

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ABSTRACT

With the RecSys conference now turning 18 years old, the recommender systems (RS) discipline ventures into adulthood. This workshop serves as a platform for introspection, examining the evolution of RS from its origins in CHI to its current state heavily influenced by and focusing on machine learning. The INTROSPECTIVES workshop aims to foster discussions on the past, present, and future of the RS discipline, inviting the community to reflect on key questions such as the maturation of RS, shifts in research focus, and the impact and success of RS in practice. Topics include the changing landscape of RS problems, the evolving role of RS in addressing choice overload to the current motivations driving RS adoption.

CCS CONCEPTS

• **Information systems** → **Personalization**; **Recommender systems**; **Evaluation of retrieval results**; • **Human-centered computing** → **HCI design and evaluation methods**.

KEYWORDS

personalized systems, recommender systems, information retrieval, reflection, introspection

1 MOTIVATION AND GOAL

In 2024, the RecSys conference turns 18 years old, the *age of majority* in most parts of the world. As the conference, and the recommender systems (RS) discipline ventures into adulthood, this workshop serves as a vehicle to reflect on what we have done so far, and where we are heading in the future.

As a research community, RecSys initially originated from CHI, and while improvements in user interaction and experience remain one of the primary application domains of recommender systems, papers presented at the RecSys conference in recent years point

towards a gradual move towards more machine learning-oriented research with less focus on the topics from RecSys' youth.

We, the organizers, have spent most of our research careers working in recommender systems, as researchers, community members, chairs, presenters, reviewers, and authors of (rejected) papers. In the three previous years, we have organized the *PERSPECTIVES* workshop in conjunction with RecSys [2–4], inviting the community to critically reflect and reason about recommender systems specifically when considering evaluation. The PERSPECTIVES workshop series was followed by a special issue in RecSys' own journal TORS [1], and concluded with a Dagstuhl workshop on the same topic in May 2024[1]. With the insights gained from the various PERSPECTIVES events, and as members of the RecSys community, we invite recommender systems researchers and practitioners to a forum for discussing the past, the present, and the future of the recommender systems discipline.

2 TOPICS OF INTEREST AND MATERIAL

The workshop program comprised a keynote talk, a panel discussion, flash pitches of accepted abstracts with discussions, and group work with discussions[2].

The keynote was held by Barry Smyth (School of Computer Science, University College Dublin), titled "People Who Liked This Also Liked... A Publication Analysis of Three Decades of Recommender Systems".

The workshop did *not* follow the traditional, widely adopted mini-conference format. Instead, the main focus of the workshop activities was on the discussions during the workshop. Therefore, to allow participants to bring in topics and questions that they consider pressing issues in the scope of the workshop theme and topics, we solicited extended abstracts on introspective questions prior to the workshop. Authors of the accepted extended abstracts pitched their ideas, followed by a very brief Q&A session. By incorporating participant-submitted abstracts into the workshop agenda, the event became more inclusive, participatory, and responsive to the diverse interests and expertise of participants and the community.

To start an *introspective reflection* on where we have arrived at during recommender systems coming of age, the following list of questions served as a starting point:

- How have recommender systems matured in the last 20 years?
- How do current recommender systems problems differ from those from 20 years ago?

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[1] https://www.dagstuhl.de/24211

[2] A detailed program and material can be found on the workshop website: https://introspectives.github.io/2024/.

- What impact have recommender systems, and recommender systems research had since their inception?
- Why has recommender systems research and practice become successful (has it)?
- What is the real new reason for having a recommender? Is it still choice overload as a starting point?

Overall, we aimed to find a common understanding of the current and future challenges of RS as a research field. Hence, a large part of the workshop was dedicated to discussions in the plenum, sharing experiences, and discussing future avenues for research and improvement.

ACKNOWLEDGMENTS

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