NORMalize 2025: The Third Workshop on Normative Design and Evaluation of Recommender Systems

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Abstract

Recommender systems are one of the most widely used applications of artificial intelligence. Their use can have far-reaching consequences for stakeholders, users, and society at large. In this third edition of the NORMalize workshop, we once again seek to advance the research agenda of *normative thinking*, considering the norms and values that underpin recommender systems, as well as to introduce the concept to a broader audience. We aim to bring together a growing community of researchers and practitioners across disciplines who want to think about the norms and values that should be considered in the design and evaluation of recommender systems, and to further educate them on how to reflect on, prioritise, and operationalise such norms and values. NORMalize 2025 is a half-day workshop focusing on discussion and interdisciplinary collaboration, building upon its two successful runs at previous RecSys conferences in 2023 and 2024.

CCS Concepts

• **Information systems** → **Recommender systems**; • **Social and professional topics** → **Systems analysis and design**.

Keywords

normative thinking, normative design, norms, values, value-sensitive design

1 Introduction

The way recommender systems are designed has far-reaching implications for society. Social media platforms shape who has a voice in the public debate [1]; algorithmic hiring systems may or may not allow people to be considered for a job [5], while music streaming platforms are 'instrumental' for artists to get paid for their craft [2]. Recent global events highlight the intricate link between politics and technology, be it tech billionaires who inform the US Trump administration[1] or the European Union withdrawing key parts of its AI regulation[2]. Hence, it is more important than ever that both academia and those working in industry are mindful of the type of research that is conducted and who has access to and control over technologies: A happy few or society at large? NORMalize hopes to contribute to the discussion by providing a platform for interdisciplinary research at the predominantly technical ACM Conference on Recommender Systems.

As in past editions during RecSys 2023 and 2024, the goal of the NORMalize workshop is to strengthen the discourse around the *normative design* of recommender systems, which means decision-making about the norms and values that underpin the design and evaluation of recommender systems. Normative thinking requires researchers and practitioners to go beyond the current state of the system (output) and instead reflect on how or what the system *should be.* This involves identifying the relevant values of a system,

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[1] https://apnews.com/article/trump-inauguration-tech-billionaires-zuckerberg-musk-wealth-0896bfc3f50d941d62cebc3074267ecd
[2] https://www.reuters.com/technology/eu-ditches-plans-regulate-tech-patents-ai-liability-online-privacy-2025-02-12/

determining how these values would be expressed in the recommended content of a system, examining how different values may conflict and justifying how certain values in such cases should be prioritized over others [3]. Importantly, normative thinking does not lead to general design standards for recommender systems. Instead, it provides the tools to develop a normative claim *for a system specifically*, given its operating environment and goals.

Key Outcomes

Similar to previous editions, NORMalize 2025 thus seeks to foster a space for interdisciplinary discussion between the humanities, social sciences, and exact sciences about the norms and values underlying the design and evaluation of recommender systems. Also like previous editions, NORMalize 2025 welcomes both the 'norm curious' and the 'norm active', by providing opportunities for both knowledge sharing and discussion. In doing so, we aim to stimulate cross-disciplinary discussion and further interdisciplinary collaboration, which will ultimately lead to better normative design and evaluation of recommender systems.

2 Organiser Biographies

Lien Michiels is a senior researcher at the Adrem Data Lab in the Deparment of Computer Science at the University of Antwerp, Belgium and imec-SMIT in the Department of Communication Science at the Vrije Universiteit Brussel. She is the lead researcher on the FWO SBO funded 'Serendipity Engine' project for the Adrem Data Lab. As part of this project, she applies normative design principles to urban and news recommender systems leading to more diverse and serendipitous experiences for users. Previously, she combined her PhD research with her work as a Machine Learning Engineer at Froomle.

Sanne Vrijenhoek is a PhD candidate at the University of Amsterdam's Institute of Information Law with a background in Artificial Intelligence. She works on an interdisciplinary project assessing diversity in news recommendations, where she among others translates normative notions of diversity into concrete concepts that can be used to inform recommender system design. Her work was awarded Best Paper Runner Up at RecSys'22 [4].

Alain D. Starke is an assistant professor in persuasive communication at the University of Amsterdam, Netherlands. He is also an adjunct associate professor in recommender systems at the SFI MediaFutures research centre for responsible media technology, which is part of the University of Bergen, Norway. His research focuses on using technological systems, such as recommender systems, to support preference shifts and behavioural change in domains of self-development, such as healthy eating, news, and sustainability.

Johannes Kruse is an industrial PhD candidate at the Technical University of Denmark's Department of Applied Mathematics and Computer Science in collaboration with the Danish news publishers Ekstra Bladet and JP/Politikens Media Group. He is in charge of developing and maintaining the core recommendation systems at EkstraBladet.dk, which serve millions of users. He focuses on creating algorithms that provide personalised recommendations while balancing relevance and diversity.

Savvina Daniil is a PhD candidate at CWI, the national research institute for mathematics and computer science in the Netherlands.

She is a member of the Human-Centered Data Analytics group of CWI, as well as the Cultural AI lab which facilitates collaboration between knowledge and cultural institutes in the Netherlands. Working with the national library of the Netherlands (KB), she researches how historical biases can propagate through the recommendation process and compromise the public library's normative values, such as inclusivity.

3 Workshop Format

NORMalize 2025 is a half-day, hybrid workshop, consisting of two parts: (1) presentations of accepted contributions and (2) breakout sessions.

In the first part, authors of accepted contributions, both early-stage research ideas and previously published works, will have the opportunity to present and discuss their work with the participants and organizers. By inviting authors to submit their previously published works or early-stage research ideas, we aim to be more inclusive of publishing traditions in the social sciences and humanities, where authors typically need to publish their work in journals to gain recognition and the primary aim of conferences is to discuss ongoing work. As a result, valuable and critical work on recommender systems often goes unnoticed by the core RecSys community, appearing instead in journals such as *AI and Society*, *Internet Policy Review* and *Digital Journalism*. By inviting the authors of these publications to present their work at NORMalize, we aim to bridge this gap.

Between the presentations, we will host breakout sessions discussing the various difficulties interdisciplinary research faces and solicit input on how to overcome them. One such topic could be the fact that different disciplines use different terminology when talking about recommender systems (for example, communication scientists often merely say 'personalization' or refer to 'social media algorithms'), which makes it harder for researchers to discover relevant and valuable work from other fields.

The full workshop program can be found on the workshop website: https://sites.google.com/view/normalizeworkshop.

4 Contributions

NORMalize 2025 called for contributions in the form of extended abstracts of early research ideas (2-4 pages) and works previously published in venues and journals that do not typically reach the core RecSys community. The topics of interest included, but were not limited to: (1) philosophical, legal, and conceptual foundations, (2) qualitative and stakeholder-centered approaches (3) value-sensitive and normative algorithm design, (4) metrics and evaluation methods, (5) datasets and data practices, (6) case studies and empirical insights. All accepted contributions will be presented at the workshop. The reviewing process for NORMalize 2025 was single-blind. Each paper was reviewed by two members of our program committee of two different backgrounds, reflecting the interdisciplinary character of NORMalize 2025.

We are grateful to our program committee, made up of scholars and practitioners from a wide range of backgrounds and expertises, for their invaluable contributions to the success of NORMalize 2025.

Acknowledgments

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