

# Ratings in, rankings out. Keep it simple, they said. But we need more than that.

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## ABSTRACT

Among the many viable research questions in the field of recommender systems, a frequently addressed problem is to accurately predict the relevance of individual items to users, with the goal of presenting the assumedly most relevant ones as recommendations. Typically, we have users' (explicit or implicit) ratings as input and rankings of items as output. Complex enough, yet too simplistic to reflect reality and indeed meet the various demands in practice. We have learned that "context matters". But what does it mean? What is the context that matters? And how do we get the relevant signals? It is more than what we currently ascribe to and reflect in what we call "context-aware recommender systems". Let's have a view to related fields that deal with context as deeply complex input. And on the output side, we have individual items and also item bundles, complementaries, sequences, repeated recommendations, etc. What do we actually want to present? And how? For who? And why? A ranked list as output may seem like an appropriate one-size-fits-all solution, does it? In this talk, I will reflect on the complexity of our research field, reach out to related fields such as context-aware computing and pervasive advertising for inspiration, and I will raise a lot of questions that have yet to be answered.

field of Licensing New Media at Austria's biggest collecting society AKM. Christine is an experienced teacher and has been teaching a wide spectrum of topics in computing and information systems across 10 institutions. She engages in mentoring for initiatives such as Women in Music Information Retrieval. More information can be found at <https://christinebauer.eu>.

## CCS CONCEPTS

• Information systems → Recommender systems.

## KEYWORDS

Complex input, Complex output

## SPEAKER

Christine Bauer is an assistant professor at Utrecht University, The Netherlands. Her research activities center on interactive intelligent systems. In doing so, she takes a human-centered perspective, where technology follows humans' and the society's needs. She focuses on context-adaptive systems and, currently, on music recommender systems in particular. Her research and teaching activities are driven by her interdisciplinary background. She holds a Doctoral degree in Social and Economic Sciences, a Diploma degree in International Business Administration, and a Master degree in Business Informatics. Furthermore, she pursued studies in jazz saxophone. Christine has authored more than 90 scientific papers in refereed journals and conference proceedings and holds 4 best paper awards as well as 3 awards for her reviewing activities. Before joining Utrecht University, she brought her prestigious Elise Richter grant to Johannes Kepler University Linz, Austria. Earlier she researched at WU Vienna, Austria, University of Cologne, Germany, and the E-Commerce Competence Center, Austria. In 2013 and 2015, she was Visiting Fellow at Carnegie Mellon University, Pittsburgh, PA, USA. Before starting her academic career, she has built up and led the