Context and Recommendations: Challenges and Results

[Abstract]

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ABSTRACT

Recommender Systems (RSs) are popular tools that automatically compute suggestions for items that are predicted to be interesting and useful to a user. They track users actions, which signal users' preferences, and aggregate them into predictive models of the users' interests. In addition to the long-term interests, which are normally acquired and modeled in RSs, the specific ephemeral needs of the users, their decision biases, the context of the search, and the context of items' usage, do influence the user's response to and evaluation for the suggested items. But appropriately modeling the user in the situational context and reasoning upon that is still challenging; there are still major technical and practical difficulties to solve: obtaining sufficient and informative data describing user preferences in context; understanding the impact of the contextual dimensions on user decision-making process; embedding the contextual dimensions in a recommendation computational model. These topics will be illustrated in the talk, making examples taken from the recommender systems that we have developed.

About the Author

Francesco Ricci is associate professor of computer science at Free University of Bozen-Bolzano, Italy. His current research interests include recommender systems, intelligent interfaces, mobile systems, machine learning, case-based reasoning, and the applications of ICT to tourism and eHealth. He has published more than one hundred of academic papers on these topics and has been invited to give talks in many international conferences, universities and companies. He is among the editors of the Handbook of Recommender Systems (Springer 2011), a reference text for researchers and practitioners working in this area. He is the editor in chief of the Journal of Information Technology & Tourism and in the editorial board of the Journal of User Modeling and User Adapted Interaction. He is member of the steering committee of the ACM Conference on Recommender Systems. He served on the program committees of several conferences, including as a program co-chair of the ACM Conference on Recommender Systems (RecSys), the International Conference on Case-Based Reasoning (ICCBR) and the International Conference on Information and Communication Technologies in Tourism (ENTER).

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