Helping People Shop on Alexa

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Biography

Vanessa Murdock leads a research group in Alexa Shopping at Amazon, whose focus is recommender systems, search and HCI. Her team provides the machine learning that backs Amazon's Choice. Previously, she worked at Microsoft as a Principal Scientist, working on location inference and notifications at Bing and Cortana. Prior to Microsoft, Murdock led the Geographic Context and Experience Group at Yahoo! Research in Barcelona, doing research on topics related to geographic information retrieval and user-generated content. She has been awarded 19 patents, and has more than 20 patent applications pending, resulting in a Master Inventor Award from Yahoo! (2012). She received the OAA Award for Outstanding Achievement by a Young Alum from the University of Massachusetts in 2014. Murdock received a Ph.D. in Computer Science from the University of Massachusetts Amherst in 2006, advised by Bruce Croft.

Summary

Alexa Shopping at Amazon focuses on enabling users to shop with a multimodal device, driven by a voice interaction. Developing a customer-friendly shopping AI entails solving basic research problems such as natural language understanding, developing natural multi-turn dialogs, high-accuracy retrieval of sparse texts, and personalizing not just the result, but the interaction itself. In this talk we discuss commerce-specific open research problems facing Alexa in the coming years.