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CONNERS: Conversationally Explainable Recommendations for Cold-Start Users

Dissertation

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Abstract

With the ever-growing bloom of E-commerce in this digital era, users are bombarded with an overload of information. As users grow accustomed to digital service offerings, personalized recommendations offer a way to combat information overload by catering to individual user needs. As the product offerings space continues to expand, users not only seek personalized recommendations for what to buy but also an explanation as to why the item was recommended. Explainability within recommendations have proven to be improve user experience, the trust within the system and even persuade users to interact further with the recommended item. This dissertation is focused on generating personalized explanations based on the conversational history within a cold-start scenario.

The proposed solution CONNERS provides a novel flow for generation of personalized natural language explanations in conversation recommendation system based on the dialogue history. To validate the results of the system a user study was conducted and achieved a considerable improvement over existing abstractive summarization model.

Subject Descriptors:

Conversational Recommendation Systems, Explainable Recommendation

Keywords:

Conversational AI, Recommendation Systems, Conversational Recommendation systems, Explainable AI, Explainable Recommendation, Natural Language Processing