

Personalized Conversation Experience on Task-Based Chatbots

Tolga Arslan, Master of Science in Computer Science
University of Dublin, Trinity College, 2022

Supervisor: Professor Vincent Wade

Interest in chatbots continues to increase rapidly. The fact that chatbots work in harmony with different systems and applications has ensured the continuous development of chatbot in today's world. As a consequence of advances in artificial intelligence, machine learning, and deep learning fields, chatbots' development techniques and usage areas expanded. This develops a task-based chatbot that offers a personalized conversation experience in the context of car rental. While developing the intended chatbot, the study did not use a pre-made training dataset and prepared its own training data. Experiencing the struggles in the process of developing a chatbot that offers a personalized chat experience with the training data it has created, this study also creates adaptive chat flows in the chatbot it has developed to increase the user experience in chatbots. The study completed an evaluation survey process by recruiting participants to evaluate user experience based on user satisfaction.

The consequences of the study show that providing a personalized conversation experience on the chatbot has a positive impact on users' experience, but at the same time, the completed survey results show that, if possible, a significant portion of users would choose to complete their transactions with real people instead of chatbots. Therefore, future studies may continue the approaches presented in this study or explore new ways to enhance the user experience in chatbots.