Abstract

TripAdvisor is the world's largest travel platform that assists 463 million travelers each month in making their trips the best they can be. Users of TripAdvisor can provide reviews, comments, and ratings of travel destinations. However, reviews on TripAdvisor are considered insufficient in helping prospective travelers understand the strengths and weaknesses of a hotel. Therefore, a multiaspect sentiment analysis of TripAdvisor reviews on hotels was conducted to identify commonly discussed rating aspects among visitors and to determine specific evaluations. In this study, the Elman Recurrent Neural Network (ERNN) method was employed to build a classification system for multiaspect sentiment analysis of user reviews on the TripAdvisor application. The aspects examined in this research include Service, Cleanliness, Location, Value, Rooms, and Overall Experience, aiming to provide insights into the hotels under consideration. The results indicate that the ERNN method can deliver superior outcomes in multiaspect sentiment analysis of TripAdvisor hotel reviews. The ERNN model's performance in multiaspect sentiment analysis shows optimal accuracies: 81.35% for Service, 98.71% for Cleanliness, 74.87% for Location, 93.84% for Value and 71.52% for Rooms. These findings can assist travelers in better understanding the strengths and weaknesses of accommodations.

Keywords: Multiaspect sentiment, TripAdvisor, Recurrent Neural Network (RNN), and Elman Recurrent Neural Network (ERNN)