Abstract

In the context of education, student evaluations of lecturers (EDOMs) play an important role in improving the quality of lecturers' teaching. EDOM data in the form of texts such as criticisms and suggestions are very difficult to analyze because they contain open-ended questions with essay answers, which require time-consuming and potentially subjective manual analysis. In this study, the data is obtained through the EDOM survey results given to ITTelkom Surabaya students before facing the end of semester exams. To overcome this challenge, this research applies sentiment analysis using the Long ShortTerm Memory (LSTM) method due to its ability to overcome the problem of relationships between words or phrases located at separate positions in the text sequence, so as to understand the complex context in the text and recognize complicated sentiment patterns. In addition, this research also develops a mobile application that uses a gamification approach to help label EDOM text as positive or negative. The gamification approach aims to remove the element of subjectivity in the text data labeling process by involving various people to provide diverse viewpoints. The results of this study show that using data from mobile applications for sentiment labeling has an accuracy of 81.66%, which is close to the accuracy of manual labeling. In addition, the developed LSTM model was able to achieve an accuracy of 94% in distinguishing positive and negative sentiments on EDOM data. This shows that the LSTM model used is quite effective and accurate in performing sentiment analysis, and the utilization of data from mobile applications is also quite close to the accuracy of manual labeling.

Keywords: *Sentiment Analysis, Lecturer Evaluation, Gamification, Long ShortTerm Memory (LSTM), Lecturer Evaluation Efficiency.*