

Abstract

A review is an opinion piece that evaluates the work or event being reviewed. An aspect is a word or phrase that describes the entity's attributes or features that is the opinion's target. In the modern era, many sites provide a forum for users to review a product; for example, the femaledaily.com site provides a forum for users to review beauty products, lipstick. Aspects contained in reviews are valuable information for business owners because, with product reviews, they can get insight and information about their products to improve the quality of their products. However, extracting aspect information from a large amount of review text requires a significant amount of time and resources if done manually. Having a system to be able to extract aspects automatically from the review text would be helpful. Therefore, this study developed an aspect extraction system using the Bidirectional Long Short-Term Memory method with Conditional Random Fields (BiLSTM-CRFs). The test results get an F1 Score value of 57% with tuning of the vector embedding layer dimension parameters of 256, the number of batches of 32, and the number of epochs of 64.

Keywords: Aspect term extraction, Conditional Random Field, Lipstick Review, Indonesian language, Bidirectional Long Short-Term Memory, BiLSTM-CRFs
