



INTISARI

DETEKSI ULASAN *DECEPTIVE* DALAM BAHASA INGGRIS MENGUNAKAN *GATED RECURRENT UNIT*

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Ulasan adalah pendapat yang ditulis oleh pengguna untuk suatu produk maupun layanan berdasarkan pengalaman dari produk yang ditinjau. Keputusan pembelian semakin dipengaruhi oleh ulasan produk dan layanan, maka dari itu dibutuhkan pendeteksian ulasan *deceptive* untuk mengurangi kerugian yang ditimbulkan oleh ulasan *deceptive*.

Pada penelitian ini digunakan model *Gated Recurrent Unit* untuk mendeteksi ulasan *deceptive*. Model dilatih dengan menggunakan data ulasan hotel yang berjumlah 1600 ulasan dengan komposisi yang seimbang. Nilai akurasi, presisi, *recall* dan *f1-score* digunakan sebagai evaluasi performa dari model.

Hasil penelitian ini menunjukkan model GRU memiliki performa akurasi, presisi, *recall*, dan *f1-score* yang masing-masing sebesar 82.19%, 79.88%, 84.52%, dan 82.13%. Model LSTM memiliki akurasi, presisi, *recall*, dan *f1-score* masing-masing sebesar 81.56%, 80.38%, 81.94%, dan 81.15%.

Kata-kata kunci : ulasan *truthful*, ulasan *deceptive*, *Gated Recurrent Unit*, *Long Short-Term Memory*, *word embedding*



ABSTRACT

DETECTING DECEPTIVE REVIEW IN ENGLISH USING GATED RECURRENT UNIT

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Reviews are opinions written by users for a product or service based on the experience of the product being reviewed. Purchasing decisions are increasingly influenced by product and service reviews, therefore detection of deceptive review is needed to minimize the losses incurred by deceptive reviews.

In this study the Gated Recurrent Unit model was used to detect truthful and deceptive reviews. The model was trained using 1600 hotel review data with a balanced composition. Accuracy, precision, recall and f1-score values will be used as an evaluation of the performance of the model.

The results of this study shows that the GRU model has accuracy, precision, recall, and f1-score performance, each of which is 82.19%, 79.88%, 84.52%, and 82.13%. The LSTM model has an accuracy, precision, recall, and f1-score of 78.75%, 77.02%, 80.00%, and 78.48%.

Keywords : truthful review, deceptive review, Gated Recurrent Unit, Long Short-Term Memory, word embedding