



PROJECT REPORT

**COMPARISON OF CBOW AND SKIP GRAM ON
SENTIMENT ANALYSIS OF BUS AGENTS REVIEWS
USING CNN**

FIDELIS RAYMOND JOSE AIRUDIN
18.K1.0062

**Faculty of Computer Science
Soegijapranata Catholic University
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ABSTRACT (ABSTRACT TITLE)

Inter-city buses are one of the most popular modes of transportation in Indonesia. Thanks to the massive development and construction of highways by the Indonesian government, today almost every city on the island of Java is connected by toll roads. This makes traveling from one city to another faster, more comfortable, and free from obstacles. This opens up great opportunities for inter-city bus entrepreneurs to attract more passengers. Currently, inter-city bus companies are aggressively rejuvenating their fleet and adding attractive facilities to passengers, so that prospective bus passengers currently have many bus options to choose from. This of course creates a problem especially for new bus users because there are too many options to choose from. If prospective bus users are wrong in choosing a bus, besides the material can be a victim, of course the experience of bus users will also be a victim. Therefore, it is necessary to create a system to detect what is the most dominant sentiment expressed by bus users who have ridden the bus before through a review. To create a system to analyze sentiment, researchers use the Convolutional Neural Network algorithm where for the input layer researchers use a matrix representation of words formed by the word embedding method using the Word2Vec algorithm. As a final result, researchers display the results of the Precision, Recall, and F1-Score calculations which show the quality of the sentiment analysis model created.

Keyword: Intercity Bus, Sentiment Analysis, Word2Vec, CNN, CBOW, Skip Gram