ABSTRACT

Deswin, *Indonesian Paraphrasing System Using a Hybrid Approach: Integration of IndoT5 with a Combination of Synonyms and Syntactic Transformation (Supervised by Titin Wahyuni, S.Pd., M.T. and Fahrim Irhamna Rachman, S.Kom., M.T.)*

Plagiarism remains a serious problem in academic writing in Indonesia; therefore, an automatic paraphrasing system is needed that can generate varied new texts without altering the original meaning. This study aims to develop an Indonesian-language paraphrasing system based on a hybrid approach by integrating the neural model IndoT5 with rule-based methods in the form of synonym substitution and syntactic transformation. IndoT5 is used to generate an initial paraphrase that is semantically coherent, which is then enriched through linguistic techniques to increase vocabulary variation and sentence structure diversity. The system is implemented using the Python programming language and Natural Language Processing libraries. Evaluation is conducted by comparing three approaches— neural, rule-based, and hybrid—based on semantic similarity, lexical diversity, fluency, quality score, and processing time. The test results show that the hybrid approach is able to produce paraphrases that are more varied than the purely neural method and more natural than the rule-based method, while still preserving the meaning of the original text. These findings indicate that the hybrid approach is effective in supporting plagiarism prevention and improving the quality of Indonesian academic writing.

Keywords: *Automatic paraphrasing, IndoT5, Hybrid approach, Natural Language Processing, Plagiarism*