Abstract

Plagiarism is a breach in the writing of scientific papers. In general, the detection of plagiarism is only done by experts who know the limits of plagiarism. Most of the boundaries of plagiarism itself is in the gray zone. Therefore needed a system that is able to mimic examiner intuition.

Fuzzy system is considered very suitable to fill the role to deal with this gray zone. However, Fuzzy systems must be trained to get close to the optimal outcome of the examiner itself. This is where Pasticle Swarm Optimization (PSO) is required as an optimizer of the fuzzy system. PSO optimizes the membership functions (leg position) of the fuzzy system. In the PSO, there is a population parameters that are to be used. This parameter will be searched its optimum value, so that a system built not take too long and has a high accuracy. Overall, the constructed fuzzy system has an accuracy of 100% of the total 57 test documents.

Keywords: *PSO, fuzzy, plagiarism.*