

Abstract

Information Retrieval (IR) is a computer science that related to retrieved information from collection documents based on the content of the documents. Process in Information Retrieval can be described as a process to collect relevant documents from collection documents based on user query. A way to increase the performance of Information Retrieval System is with optimize query. In this way, some keywords will be added into user query to create a new query formulation. Genetic Algorithm can be applied in Information Retrieval to search optimized keywords based on user query that will be added into user query to perform a new query formulation. The result show that applied Genetic Algorithm in Information Retrieval System can be able to increase the performance of it. Besides that, another advantage of using Genetic Algorithm in Information Retrieval System is that a new query formulation based from user query can be create more than one query so that user can try to find another result from query expansion.

Keywords: *Information Retrieval, Information Retrieval System, Genetic Algorithm, keywords, and query.*