**CERTIFICATION**

This is to certify that this project work, **HYBRID ALGORITHM FOR TEXT SUMMARIZATION USING NON-NEGATIVE MATRIX FACTORIZATION AND ARTIFICIAL BEE COLONY** is prepared by the unlisted students and supervised by **Mr. Rufai M. M** and submitted to the **computer Technology Department,** Yaba College of Technology, Yaba Lagos, in partial fulfillment of the award of Higher National Diploma (HND) in Computer Science.

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**DEDICATION**

This piece of work is dedicated to the Almighty God for his divine protection both physically and spiritually throughout the period of our program and also to our caring parents and lecturers.

**ACKNOWLEDGEMENT**

Our ultimate gratitude goes to God Almighty for sparing our life throughout our program in Yaba College of technology, Lagos, for the wisdom and knowledge given to us to be able to produce this write-up.

Our profound gratitude goes to our parents for their moral and financial support and also our warmest gratitude goes to our supervisor, Mr. Rufai M. M and the entire staff of computer Technology Department. Finally we express our indebtedness to all who have directly and indirectly contributed to the success of this project. Thank you all.

**ABSTRACT**

There is huge number of information available on the internet. Relevant information can be considered by creating summary from the original document. Traditionally, summary is created manually by reading the entire document and extracting the key points out from the source document. The task of creating summary manually is a complicated one and getting data fast and efficient has been considered as serious issue. In order to extract the useful information from a given text document within short time and also to avoid the idea of reading the entire document, there is a need for an automated text summarization that can extract only relevant information from the original document. The objective of this study is to develop an application that seeks to provide quality and accurate summary of text document, provide a better means of clustering document with the intention of getting the key points from the source document. The main method used for this research work is online source. Data were collected from different e-books and online journals which serve as a tool for information gathering. The following are the software requirements for this application. Java Netbeans IDE 7.2, structured query language (SQL) server 2005, windows operating system and anti-virus package to prevent the application from virus attack. The above listed software will work perfectly with the under listed hardware specification, as a computer is not complete without either the software or hardware. The hardware requirements are as follows; 1 gigabyte RAM, 1.5GH processor, 200GB Hard Disk or higher (recommended), uninterrupted power supply (UPS), mouse and enhanced keyboard. Finally this project was able to achieve its result by summarizing five (5) different text documents and displaying its summary output based on the percentage selected.

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