

**ABSTRACT:**

As the Internet help us cross cultural border by providing different information, plagiarism issue is bound to arise. As a result, plagiarism detection becomes more demanding in overcoming this issue. Different plagiarism detection tools have been developed based on various detection techniques. Nowadays, fingerprint matching technique plays an important role in those detection tools. However, in handling some large content articles, there are some weaknesses in fingerprint matching technique especially in space and time consumption issue. In this paper, we propose a new approach to detect plagiarism which integrates the use of fingerprint matching technique with four key features to assist in the detection process. These proposed features are capable to choose the main point or key sentence in the articles to be compared. Those selected sentence will be undergo the fingerprint matching process in order to detect the similarity between the sentences. Hence, time and space usage for the comparison process is reduced without affecting the effectiveness of the plagiarism detection.