

PLAGIARISM DETECTION ON ELECTRONIC SUBMISSIONS OF TEXT BASED ASSIGNMENTS

Mohamed Abdul Cader Jiffriya

Postgraduate Institute of Science

University of Peradeniya

Peradeniya

Sri Lanka

Plagiarism is one of the growing issues in academic filed. Plagiarism is known as copying other's document or use of others' information without proper citation or acknowledgement. It is considered as illegal act in a moral society.

Plagiarism on text based assignment is a current issue in university system in Sri Lanka. Academic staff members are in charge for assessing assignments. Therefore, they are facing difficulties on marking assignment with high degree of judgment and waste their valuable time for plagiarism detection.

A plagiarism detection tool named as AntiPlag was developed using Tri-gram sequence matching technique to minimize this issue on text based digital assignment. Electronic assignments were tested by using this tool on Linux based Environment and the results were compared with exiting plagiarism detection tool known as Plagiarism Checker X.

The AntiPlag is faster and showed better results than the Plagiarism Checker X. Detection processes in the AntiPlag were optimized through clustering approach. AntiPlag tool showed 98 percentage of plagiarism whereas Plagiarism Checker X showed 67 percentage of plagiarism.

The AntiPlag is capable of comparing all pairs of assignments automatically at once. It is simple, small in size and user do not need much knowledge to handle this tool. So AntiPlag is an effective tool for plagiarism detection on text based electronic assignments.

