Translation of Brahmi Inscriptions to Sinhala using Natural Language Processing

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Authors:
Nethmi Hettiarachchi, Indrachapa Pathiraja, Dilum Madawala

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Abstract

The recognition and translation of handwritten characters that were written without constraints is challenging. In this particular domain of interest “ancient inscriptions”, character recognition and translation is more curtail due to the wide variety of endemic writing styles. Research project named “Brahmi to Sinhala Translator”, is a result of an idea of coming up with a software solution to translate the ancient inscriptions written in “Mula Brahmi” language to Sinhala. According to the facts that found through the researchers, it is clear that, there is a huge gap between the Archeology and modern technology. Therefor archeologists still follow manual procedures to get their work done. “Brahmi to Sinhala Translator” is based on image processing, character recognition, text mining and natural language processing [1]. This project has been divided into four different functionalities. Removing the noise of the scanned image of the stain paper, recognition of letter patterns of Brahmi language, identification the corresponding Sinhala letter to the Brahmi letter and performing word and sentence break down and represent Brahmi Script in Sinhala. Since the proposed solution is a step by step approach,
it will be able to provide a user friendly environment yet robust and accurate. Therefore this will 
be a great innovation for not only the field of archeology but also for the information technology.

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Index Terms

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Keywords

Image Processing; Wavelet Decomposition; Character Recognition; Text Mining; Natural 
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