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Authors:
Deepali D. Kayande

Jignyasa Sanghvi

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Abstract

SMSLingo, a hybrid compression technique is a conjunction of RLE with static dictionary encoders based on lossless reversible transformation. This will be used for text file compression to offer better compression ratio and allow better utilization of internal memory on Android platform. The idea behind the technique is of converting the normal English text into short-form words using static dictionary and then applying Run Length Encoding (RLE) technique on this converted short-form text. Experimental results are evaluated and comparison is made between 3 text compression techniques, Huffman Coding, RLE and SMS Lingo. Promising rise is seen in the achieved results using the SMS Lingo compression

algorithm in comparison with other available methods. Also this application is reasonably smaller in size as compared to the size of default SMS application present on Android platforms and with the other SMS compressor applications present for the platform. The RAM and cache memory consumption is around 3 MB for this application where the default Messaging application requires around 8 MB. Thus the proposed hybrid technique is reasonable with respect to RAM as well as cache memory consumption.

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Index Terms

Computer Science Memory Optimization

Keywords

Sms Compression Internal Memory Android Platform Memory Optimization Run Length Encoding

Dictionary Encoders.