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Using pre-determined patterns to analyze the common behavior of compressed data and their compressibility appeal (Article)

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Abstract

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This paper studies the behavior of compressed/uncompressed data on predetermined binary patterns. These patterns were generated according to specific criteria to ensure that they represent binary files. Each pattern is structurally unique. This study shows that all compressed data behave almost similarly when analyzing predetermined patterns. They all follow a curve similar to that of a skewed normal distribution. The uncompressed data, on the other hand, behave differently. Each file of uncompressed data plots its own curve without a specific shape. The paper confirms the side effect of these patterns, and the fact that they can be used to measure the compressibility appeal of compressed data. © 2016 Authors.

Author keywords

- Compressed data Compressibility Patterns Randomness Uncompressed data

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