Prediction of Compression Ratio for Transform-based Lossy Compression in Time-series Datasets for ICACT Conference

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Abstract— **As many IoT devices generate an enormous and varied amount of data that need to be processed in a very short time, storing and processing IoT big data become a huge challenge. While lossy compression can dramatically reduce data volume, finding an optimal balance between volume reduction and information loss is not an easy task. The compression ratio is within a range tolerable by the application is crucial. Motivated by this, we analyze the characteristics of data compressed and present a prediction model about the compression ratio of transformation-based lossy compression algorithms for IoT datasets collected.**

Keyword— IoT(Internet of Thing), Data analytics, lossy compression

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