



Linear Complexity Lossy Compressor for Binary Redundant Memoryless Sources

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A lossy compression algorithm for binary redundant memoryless sources is presented. The proposed scheme is based on sparse graph codes. By introducing a nonlinear function, redundant memoryless sequences can be compressed. We propose a linear complexity compressor based on the extended belief propagation, into which an inertia term is heuristically introduced, and show that it has near-optimal performance for moderate block lengths.

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