Figure 1: Error and compression rates on the example.

Figure 2: Error rates on the simulated dataset.

Figure 3: Compression rates on the simulated dataset.

Table 1: Frequency of self-nested trees with given maximal height and ramification number with respect to unordered trees under the same constraint.

| h ≤ 2 | deg ≤ 2 | 0.88 | 6.18.10^-1 | 3.52.10^-1 |
| h ≤ 3 | deg ≤ 3 | 0.49 | 3.38.10^-2 | 7.43.10^-5 |
| h ≤ 4 | deg ≤ 4 | 0.07 | 2.90.10^-8 | 4.16.10^-23 |
| h ≤ 5 | deg ≤ 5 | 0.36.10^-4 | 3.56.10^-28 | 1.66.10^-100 |

Among trees of height 5 and outdegree less than m, the tree that is the farthest to a self-nested tree may be identified. The editing distance to its best self-nested approximation is of order 0.25 m^5. The diameter of the space of unordered trees being of order m^4, it follows that the largest area without any self-nested tree is of relative radius 0.25. In addition, the error rate for this tree (and thus the worst error rate that must be expected from any lossy compression algorithm) is of order 0.33.

**REFERENCES**


**CONTACT INFORMATION**

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