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Decision tree classification with bounded number of errors

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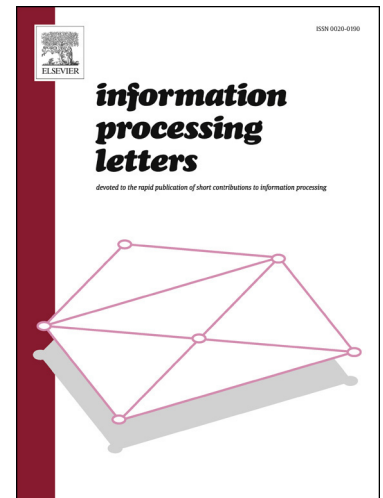
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Highlights

- We consider the problem of approximating oblivious decision trees.
- We study the more general case where at most k classification errors are allowed.
- An approximation algorithm based on randomized rounding is proposed.
- We obtain the best possible approximation factor unless $\mathcal{P} = \mathcal{NP}$.

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