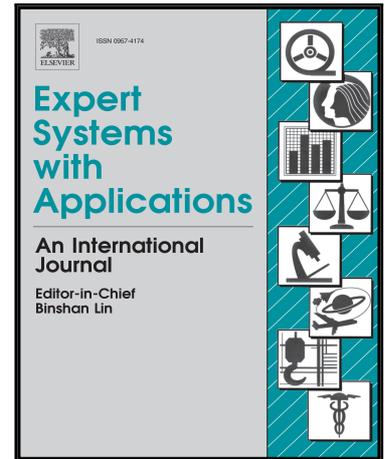


Accepted Manuscript

Differentially Private Random Decision Forests using Smooth Sensitivity

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PII: S0957-4174(17)30042-8
DOI: [10.1016/j.eswa.2017.01.034](https://doi.org/10.1016/j.eswa.2017.01.034)
Reference: ESWA 11082



To appear in: *Expert Systems With Applications*

Received date: 29 September 2016
Revised date: 12 January 2017
Accepted date: 25 January 2017

Please cite this article as: Sam Fletcher, Md Zahidul Islam, Differentially Private Random Decision Forests using Smooth Sensitivity, *Expert Systems With Applications* (2017), doi: [10.1016/j.eswa.2017.01.034](https://doi.org/10.1016/j.eswa.2017.01.034)

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Highlights

- We propose an algorithm that produces a differentially-private random decision forest
- The decision forest substantially outperforms the current state-of-the-art
- The algorithm only uses queries that are very insensitive to fluctuations in the data
- The optimal depth for random decision trees with continuous attributes is calculated
- Sampling without replacement for each tree is shown to improve prediction accuracy

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