

Accepted Manuscript

Imprecise Monte Carlo simulation and iterative importance sampling for the estimation of lower previsions

Matthias C.M. Troffaes

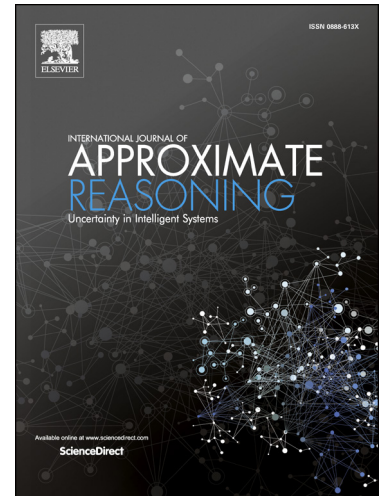
PII: S0888-613X(17)30586-8
DOI: <https://doi.org/10.1016/j.ijar.2018.06.009>
Reference: IJA 8229

To appear in: *International Journal of Approximate Reasoning*

Received date: 3 December 2017
Revised date: 26 June 2018
Accepted date: 27 June 2018

Please cite this article in press as: M.C.M. Troffaes, Imprecise Monte Carlo simulation and iterative importance sampling for the estimation of lower previsions, *Int. J. Approx. Reason.* (2018), <https://doi.org/10.1016/j.ijar.2018.06.009>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



Highlights

- Theoretical framework for studying numerical estimation of lower previsions.
- Study of consistency of imprecise estimators.
- For sub-Gaussian estimators, theoretical bounds the bias and proof of consistency.
- New upper estimator, which can be used along with the standard lower estimator, in order to provide a simple confidence interval.
- Two simple case studies on imprecise importance sampling.
- New iterative importance sampling method to drastically improve the performance.

Download English Version:

<https://daneshyari.com/en/article/6858743>

Download Persian Version:

<https://daneshyari.com/article/6858743>

[Daneshyari.com](https://daneshyari.com)