

Accepted Manuscript

Support vector regression based metamodeling for seismic reliability analysis of structures

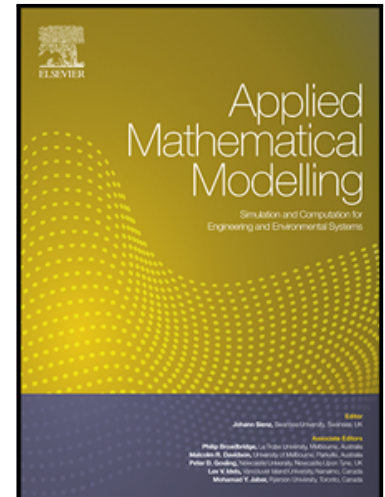
Shyamal Ghosh , Atin Roy , Subrata Chakraborty

PII: S0307-904X(18)30372-X
DOI: <https://doi.org/10.1016/j.apm.2018.07.054>
Reference: APM 12407

To appear in: *Applied Mathematical Modelling*

Received date: 3 November 2017
Revised date: 25 July 2018
Accepted date: 31 July 2018

Please cite this article as: Shyamal Ghosh , Atin Roy , Subrata Chakraborty , Support vector regression based metamodeling for seismic reliability analysis of structures, *Applied Mathematical Modelling* (2018), doi: <https://doi.org/10.1016/j.apm.2018.07.054>



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.

- Improved seismic reliability analysis by support vector regression based metamodel
- A simple effective algorithm to minimize the mean square error to obtain the model parameters
- Generating a suite of metamodels to implicitly takes into account the record to record variation
- Simulation by random metamodel selection with no additional computational burden and distribution assumption
- Numerical elucidation of the effectiveness of the proposed approach for seismic reliability analysis

ACCEPTED MANUSCRIPT

Download English Version:

<https://daneshyari.com/en/article/11007233>

Download Persian Version:

<https://daneshyari.com/article/11007233>

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