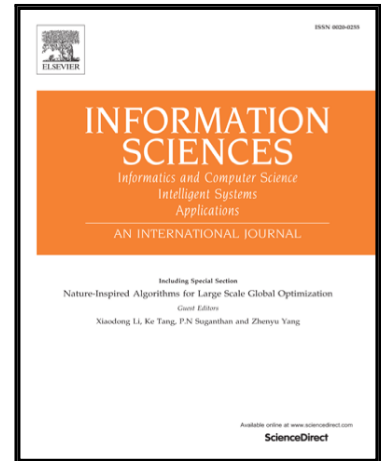


Accepted Manuscript

Nature-inspired metaheuristic optimization in least squares support vector regression for obtaining bridge scour information

Jui-Sheng Chou , Anh-Duc Pham

PII: S0020-0255(17)30552-2
DOI: [10.1016/j.ins.2017.02.051](https://doi.org/10.1016/j.ins.2017.02.051)
Reference: INS 12774



To appear in: *Information Sciences*

Received date: 14 June 2014
Revised date: 16 February 2017
Accepted date: 18 February 2017

Please cite this article as: Jui-Sheng Chou , Anh-Duc Pham , Nature-inspired metaheuristic optimization in least squares support vector regression for obtaining bridge scour information, *Information Sciences* (2017), doi: [10.1016/j.ins.2017.02.051](https://doi.org/10.1016/j.ins.2017.02.051)

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

- A novel model is proposed for enhancing prediction accuracy in engineering design.
- A nature-inspired metaheuristic information model is constructed for use in global optimization.
- The parameters of LS-SVR are optimized using a firefly algorithm and chaotic adaptive intelligence.
- The proposed model outperforms other predictive methods through cross-fold validation and hypothesis testing.
- The approach can be effectively applied to engineering substructures.

ACCEPTED MANUSCRIPT

Download English Version:

<https://daneshyari.com/en/article/4944494>

Download Persian Version:

<https://daneshyari.com/article/4944494>

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