Scopus

Document details

→] Export ⤓ Download 🖶 Print ✉ E-mail 📄 Save to PDF ☆ Add to List More... ›

Full Text   View at Publisher

Bees algorithm enhanced with Nelder and Mead method for numerical function optimisation (Conference Paper)

Kamaruddin, S.[a] ✉, Bahari, M.S.[b] ✉, Pham, D.T.[c] ✉, Hamzas, M.F.M.A.[b] ✉, Zakaria, S.[b] ✉   ⚲

[a]Department of Manufacturing and Materials Engineering, Kulliyyah of Engineering, International Islamic University Malaysia, Gombak, Selangor, 53100, Malaysia
[b]School of Manufacturing Engineering, Universiti Malaysia Perlis, Kangar, Perlis, 01000, Malaysia
[c]Department of Mechanical Engineering, School of Engineering, University of Birmingham, B15 3TT, United Kingdom

Abstract   ⌄ View references (24)

The Bees Algorithm is a population-based optimisation algorithm inspired by the food foraging behaviour of honey bees. Over the years, this algorithm has been successfully applied to many optimisation problems. In order to enhance its accuracy and convergence rate, it is proposed to employ the Nelder and Mead (NM) method to implement the local search phase of the algorithm. The enhanced algorithm uses directional information to direct recruited bees towards better fitness positions within the local search area. The performance of the proposed algorithm was tested on a set of seventeen well-known benchmark functions. Numerical results show that the proposed algorithm generally performs better than the standard Bees Algorithm. © 2019 Author(s).

SciVal Topic Prominence ⓘ

Topic: Algorithms | Optimization | Search equation

Prominence percentile: 95.350   ⓘ

References (24)   View in search results format ›

☐ All   Export 🖶 Print ✉ E-mail 📄 Save to PDF Create bibliography

☐ 1 Akay, B., Karaboga, D.
Artificial bee colony algorithm for large-scale problems and engineering design optimization
(2012) Journal of Intelligent Manufacturing, 23 (4), pp. 1001-1014. Cited 231 times.
doi: 10.1007/s10845-010-0393-4

View at Publisher

Metrics ⓘ

✳

PlumX Metrics   ⌄
Usage, Captures, Mentions, Social Media and Citations beyond Scopus.

Cited by 0 documents

Inform me when this document is cited in Scopus:

Set citation alert ›

Set citation feed ›

Related documents

Tuning of LQR controller for an experimental inverted pendulum system based on the bees algorithm
Bilgic, H.H. , Sen, M.A. , Kalyoncu, M.
(2016) Journal of Vibroengineering

A comparative study of the Bees Algorithm as a tool for function optimisation
Pham, D.T. , Castellani, M.
(2015) Cogent Engineering

An enhancement to the Bees Algorithm with slope angle computation and Hill Climbing Algorithm and its applications on scheduling and continuous-type optimisation problem
Yuce, B. , Pham, D.T. , Packianather, M.S.
(2015) Production and Manufacturing Research

View all related documents based on references

Find more related documents in Scopus based on:

Authors ›