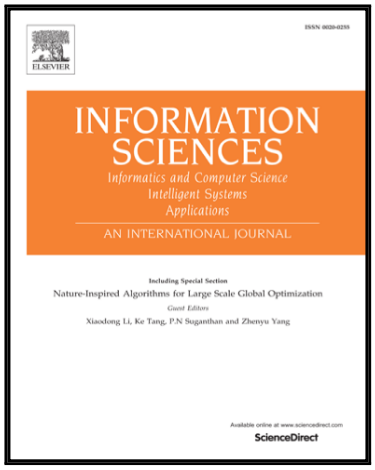
Accepted Manuscript



An Alternative Artificial Bee Colony Algorithm with Destructive-Constructive Neighbourhood Operator for the Problem of Composing Medical Crews

José A. Delgado-Osuna, Manuel Lozano, Carlos García-Martínez

PII: S0020-0255(15)00559-9
DOI: 10.1016/j.ins.2015.07.051
Reference: INS 11697

To appear in: *Information Sciences*

Received date: 7 March 2015
Revised date: 9 June 2015
Accepted date: 29 July 2015

Please cite this article as: José A. Delgado-Osuna, Manuel Lozano, Carlos García-Martínez, An Alternative Artificial Bee Colony Algorithm with Destructive-Constructive Neighbourhood Operator for the Problem of Composing Medical Crews, *Information Sciences* (2015), doi: 10.1016/j.ins.2015.07.051

Highlights

- We address the problem of composing medical crews according to the principles of Equity and Efficiency.
- An artificial bee colony algorithm and a local search procedure are proposed for this problem.
- Bees partially destroy and heuristically construct previous solutions to produce new candidate configurations.
- The results on three context with increasing difficult levels show the proposal as a tool of choice for the problem.