

## Controlling behavioral and structural parameters in evolutionary algorithms

Submitted by Emmanuel Lemoine on Mon, 10/06/2014 - 18:25

Titre Controlling behavioral and structural parameters in evolutionary algorithms

Type de publication Communication

Type Communication sans actes dans un congrès

Année 2010

Langue Anglais

Date du colloque 2010

Titre du colloque Artificial Evolution

Volume 5975

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Pays France

Résumé en anglais

Evolutionary algorithms have been efficiently used for solving combinatorial problems. However a successful application rely on a good definition of the algorithm structure and a correct search guidance. Similarly to the majority of metaheuristic methods, the performance of an evolutionary algorithm is intrinsically linked to its ability to properly manage the balance between the exploitation and the exploration of the search space. Recently, new approaches have emerged to make these algorithms more independent, especially by automating the setting of parameters. We propose a new approach whose objective is twofold: (1) to manage an important set of potential operators, whose performances are a priori unknown, and (2) to dynamically control the behavior of operators in a evolutionary algorithm, thanks to their probabilities of application.

Notes Date du colloque : 10/2009

URL de la notice <http://okina.univ-angers.fr/publications/ua4492> [4]

DOI 10.1007/978-3-642-14156-0 [5]

Lien vers le document en ligne <http://dx.doi.org/10.1007/978-3-642-14156-0> [5]

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### Liens

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