

Applying FireFly Algorithm to solve the problem of balancing curricula

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The problem of assigning a balanced academic curriculum to academic periods of a curriculum, that is, the balancing curricula, represents a traditional challenge for every educational institution which look for a match among students and professors. This article proposes a solution for the balancing curricula problem using an optimization technique based on the attraction of fireflies (FA) meta-heuristic. We perform a set of test and real instances to measure the performance of our solution proposal just looking to deliver a system that will simplify the process of designing a curricular network in higher education institutions. The obtained results show that our solution achieves a fairly fast convergence and finds the optimum known in most of the tests carried out. © 2018 The Science and Information (SAI) Organization Limited.

Attraction of fire-flies meta-heuristic

Balanced academic curriculum

Optimization