

A software project management problem solved by firefly algorithm

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In software project management there are several problems to deal, one of those is the Software Project Scheduling Problem (SPSP). This problem requires to assign a set of resources to tasks for a given project, trying to decrease the duration and cost of the whole project. The workers and their skills are the main resources in the project. In this paper we present the SPSP as a combinatorial optimization problem and a novel approach to solve SPSP by a Firefly algorithm. Firefly algorithm is a new metaheuristic based on the behaviour of the firefly. We present the design of the resolution model to solve the SPSP using an algorithm of fireflies and we illustrate some experimental results in order to demonstrate the viability and soundness of our approach. © Springer International Publishing Switzerland 2016.

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