

Dynamic Solution Probability Acceptance Within the Flower Pollination Algorithm for Combinatorial t-Way Test Suite Generation

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Abstract:

In this paper, the enhanced Flower Pollination Algorithm (FPA) algorithm, called imFPA, has been proposed. Within imFPA, the static selection probability is replaced by the dynamic solution selection probability in order to enhance the intensification and diversification of the overall search process. Experimental adoptions on combinatorial t-way test suite generation problem (where t indicates the interaction strength) show that imFPA produces very competitive results as compared to existing strategies.

Keywords: : Search-Based Software Engineering; Meta-Heuristic; Flower Pollination Algorithm; T-Way Testing; Test Suite Generation

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