Experimental Model for Teaching Software Testing

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ABSTRACT

The topic of software testing in education has become appealing to some although most researchers focused on researching software testing tools and methods. This is because of the increase awareness of the importance of adding software testing to the curricula in universities. In this paper, we propose the concept of teaching software testing with an experimental model for pairwise testing; developed with Migrating Birds Optimization (MBO) algorithm called Experimental Model for Teaching Software Testing (EMTST). The EMTST framework is explained in details and along with the comparison of MBO algorithm with other pairwise strategies. In conclusion, this strategy with MBO can help students understand the concept and practical aspect of the development of a pairwise strategy and how to evaluate the effectiveness of the algorithm in AI-based pairwise strategy.

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