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Solving the Pseudo-Geometric Traveling Salesman Problem with the “Union Husk” Algorithm

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Abstract : This study explores the pseudo-geometric version of the extensively researched Traveling Salesman Problem (TSP), proposing a novel generalization of existing algorithms which are traditionally confined to the geometric version. By adapting the "onion husk" method and introducing auxiliary algorithms, this research fills a notable gap in the existing literature. Through computational experiments using randomly generated data, several metrics were analyzed to validate the proposed approach's efficacy. Preliminary results align with expected outcomes, indicating a promising advancement in TSP solutions.

Keywords : optimization problems, traveling salesman problem, heuristic algorithms, “onion husk” algorithm, pseudo-geometric version
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