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Performance Comparison of Prim's and Ant Colony Optimization Algorithm to Select Shortest Path in Case of Link Failure

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Abstract : —Ant Colony Optimization (ACO) is a promising modern approach to the unused combinatorial optimization. Here ACO is applied to finding the shortest during communication link failure. In this paper, the performances of the prim's and ACO algorithm are made. By comparing the time complexity and program execution time as set of parameters, we demonstrate the pleasant performance of ACO in finding excellent solution to finding shortest path during communication link failure.

Keywords : ant colony optimization, link failure, prim's algorithm, shortest path
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