Abstract

Query optimization is challenging task in database. Many different types of techniques used to optimize query. Heuristic Greedy, Iterative Improvement and Ant Colony algorithms is being used to query optimization. Ant colony Algorithm used to find optimal solution for different type of problems. In this paper we modify Ant Colony Algorithm for query optimization and will show the comparison execution time between Heuristic based optimization, Ant Colony Optimization and Modified Ant Colony optimization algorithms. After implementation of said existing algorithms and modified Ant Colony optimization algorithms we found that modified Ant colony taking less computation time as compare to others algorithms.

References

Query Optimization using Modified Ant Colony Algorithm


18. M. Dorigo and G. D. Caro, “ant algorithms for discrete optimization”, Artificial Life, vol. 5,
20. J. Dero and P. Siarry, “Continuous interacting ant colony algorithm based on dense
22. L. M. Gambardella, E. Taillard and M. Dorigo, “Ant colonies for the quadratic assignment
39-54.
24. S. Leng, X. B. Wei and W. Y. Zhang, “Improved ACO scheduling algorithm based on
flexible process”, Transactions of Nanjing University of Aeronautics and Astronautics, vol. 23,
26. S. Mao and C. L. Zhao, “Unequal clustering algorithm for WSN based on fuzzy logic and
improved ACO”, Journal of China Universities of Posts and Telecommunications, vol. 18, no. 6,
27. A. Ugur and D. Aydin, “Improving performance of ACO algorithms using crossover
mechanism based on best tours graph”, International Journal of Innovative Computing,
Optimization algorithm”, Journal of Information and Computational Science, vol. 11, no. 6,
31. H. S. Paulora, T. Maria, A. Steiner and S. Scheer, “A new approach to solve the
32. Ping Duan, Yong AI, Research on an Improved Ant Colony Optimization Algorithm and
223-234.

Index Terms

Computer Science

Algorithms
Keywords

Query Optimization, Heuristic-based optimizers, Ant-Colony, Modified Ant Colony.