Abstract

As the name suggests, Single source shortest path is a technique to find the shortest path corresponding to a source vertex. Single source can be implemented using greedy and dynamic approach. There are many approaches proposed for the same. The idea is to minimize the complexity of the algorithm. This paper presents a review of different algorithm proposed for this technique and compares the complexity and efficiency of each approach. It analyzes each algorithm and takes into account the different parameters involved and hence provide an overview of it. It helps us to know various advantages proposed by different algorithm.

References

1. A Yang, D. C. Zhang and P.R. China, 'The Replicated Data Algorithm for Solving the Single Source Shortest Path Problem'.
2. Pritam Roy, "A New Memetic Algorithm with GA Crossover Technique to solve Single
Comparative Study for Trends of Solving Single Source Shortest Path Problems

3. Suranga Chandima Nanayakkara, Dipti Srinivasan, Lai Wei Lup Xavier German, Elizabeth Taylor and S.H. Ong, "Genetic Algorithm Based Route Planner for Large Urban Street Networks".
4. Yusi Wei and Shojiro Tanaka, "An Improved Thorup Shortest Paths Algorithm with a Modified Component Tree".
7. Tianrui Li, Luole Qi, Da Ruan, "An Efficient Algorithm for the Single-Source Shortest Path Problem in Graph".
8. JinFu Leng and Wen Zeng, "An Improved Shortest Path Algorithm for Computing One-to-one Shortest Paths On Road Networks".
9. R. Iris Bahar, Gary D. Hachtel, Enrico Macii, Abelardo Pardo, Massimo Poncino and Fabio Somenzi, "An ADD-Based Algorithm for Shortest Path Back-Tracing of Large Graph".
10. Afshin Ghanizadeh, Saman Sinaie, Amir Atapour Abarghouei, and Siti Mariyam Shamsuddin, "A Fuzzy Particle Swarm Optimization Based Algorithm for Solving Shortest Path Problem".

Index Terms

Computer Science Information Sciences

Keywords

Single Source Shortest Path(SSSP), Li-Qi(LQ), SIMD(Simple Instruction Multiple Data), SPFA(Shortest Path Faster Algorithm), Algebraic Decision Diagram(ADD).