Abstract

This paper is based on survey of various algorithms for all pair shortest path problem (APSP) on arbitrary real weighted directed graphs. This paper has summarized existing methods for solving shortest-path problems. In particular, we have addressed both sequential and parallel algorithms. We begin with a review of conventional sequential shortest-path algorithms and later, we have discussed blocked and vectorized implementation, thereby with the aim of reducing computational effort.

References

- [Floyd%E2%80%93Warshall_algorithm](http://en.wikipedia.org/wiki/Floyd%E2%80%93Warshall_algorithm)
November 1993.
- Gayathri Venkataraman, Sartaj Sahni, and Srabani Mukhopadhyaya, "A Blocked All Pairs Shortest-Paths Algorithm;"
- Sungchul Han and Sukchan Kang, "Optimizing All-Pairs Shortest-Path Algorithm Using Vector Instructions;"

Index Terms
Computer Science
Algorithms

Keywords
APSP  Repeated Squaring Method  ADD Based Algorithm  Kleene's Algorithm  Blocked Implementation