Computation of Shortest Path in a Fuzzy Network: Case Study with Rajasthan Roadways Network

Abstract

This paper proposes a shortest path problem with fuzzy parameters in the domain of Operations Research, which is based on Bellman Dynamic Programming algorithm. Attention has been paid to the study of fuzzy network with topological ordering. Here we discuss the shortest path problem from a specified vertex to all other vertices in a network. For illustration, a real-life example has been considered from Rajasthan State Roadways Transport Network.

Reference

- X. Wang and E. E. Kerre, “Reasonable properties for the ordering of fuzzy quantities (I),”
Index Terms

Computer Science    Operations Research

Key words

Shortest path    Weighted graph    Triangular fuzzy number

Bellman dynamic

programming