Critical Path Problem under Fuzzy Environment

Abstract

In this paper, a novel approach has been made to find the critical path in a directed acyclic graph, where for each arc lengths fuzzy numbers are assigned instead of crisp numbers. Procedures are designed to find the optimal path, and finally illustrative examples are provided to demonstrate the proposed approach.

References


Index Terms

Computer Science

Applied Mathematics

Keywords

Network (Graph) Trapezoidal fuzzy numbers -cut interval numbers Signed distance measure

Centroid measure

Magnitude measure
Area measure

Metric distance

Ranking degree

Mean-Width notation of \(-\text{cut interval numbers}\)

Critical path.