

Distance Vector Routing

BELLMAN - FORD ALGORITHM

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INTRODUCTION

The Bellman-Ford algorithm is a graph traversal technique used to calculate the shortest path from a single source to all other vertices in a weighted graph, even with negative edge weights. In this project, I implemented the algorithm demonstrating its ability to detect negative weight cycles and efficiently calculate paths, making it suitable for network routing and optimization problems.



OBJECTIVES

ADD EDGE

You can add edges from source to destination with weights



ADD NODE

You can add new nodes



RANDOM GRAPH

Generate a completely new random graph

RUN ALGORITHM

Run algorithm and enter source node to get routing table

ABOUT PROJECT

Efficiently calculates shortest paths and detects negative weight cycles using the Bellman-Ford algorithm in JavaScript.

Visualizes the weighted directional graphs using SVG elements.



MERITS

HANDLES
GRAPH
CONTAINING
NEGATIVE
EDGE WEIGHTS

WORKS FOR
BOTH
DIRECTED AND
UNDIRECTED
GRAPHS

EASY TO
IMPLEMENT
AND
UNDERSTAND

THANK YOU

