

Lesson 4: Maximum-flow Problems

Notes

Book acknowledgment:

Goals

- Maximum Flow

1 Try it on your own

2 Problem Definition

2.1 Notation

Given a directed graph $G = (V, A)$, let $c_{uv} \geq 0$ be the capacity on each arc $(u, v) \in A$. For each $(u, v) \in A$, then $(v, u) \notin A$.

3 Ford-Fulkerson Algorithm

4 Edmonds-Karp Algorithm

5 Push-relabel Algorithms