Abstract

In this paper a generalized Engel's algorithm based on known Engel's algorithm has been introduced. Using this algorithm playing time of chip-firing game which is defined on directed graph, can be minimized for evaluation of absorbing probability of an absorbing Markov chain. Here proposed algorithm has been compared empirically in terms of timings, for playing game as well as for determining absorbing probability. As MATLAB is a high-performance language for technical computing, hence here performance of generalized algorithm will be analyze by MATLAB language.
Generalized Engel's Algorithm for Minimizing Playing Time to Stabilize the Initial Configuration and for finding Absorbing Probability


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