

# A Probabilistic Cellular Automata Based Algorithm for Load Balancing in Cellular Mobile Systems

A. Rahimi    M. R. Meybodi    H. Beigy

Soft Computing Laboratory  
Computer Engineering Department  
Amirkabir University of Technology  
Tehran   Iran

Email: (beigy, meybodi)@ce.aut.ac.ir

**Abstract:** In this paper a distributed algorithm for load balancing for cellular mobile systems, which is based on probabilistic cellular automata, is presented. The proposed algorithm unlike existing algorithms provides higher degree of independence for each cell of cellular systems for decision-making. Simulations results show that the proposed algorithm performs well under medium load.