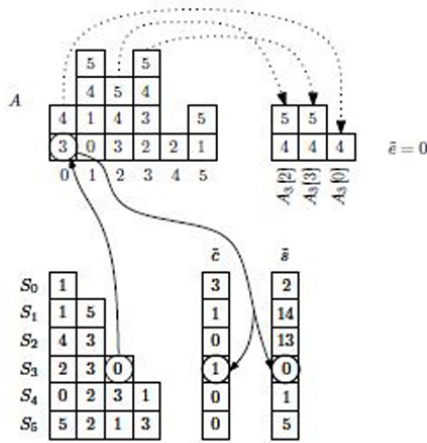


Finding extremal sets on the GPU

Fort, Marta; Sellares, J. Antoni



The extremal sets of a family FF of sets consist of all sets of FF that are maximal or minimal with respect to the partial order induced by the subset relation in FF . In this paper we present efficient parallel GPU-based algorithms, designed under CUDA architecture, for finding the extremal sets of a family FF of sets. The complexity analysis of the presented algorithms together with experimental results showing the efficiency and scalability of the approach is provided.