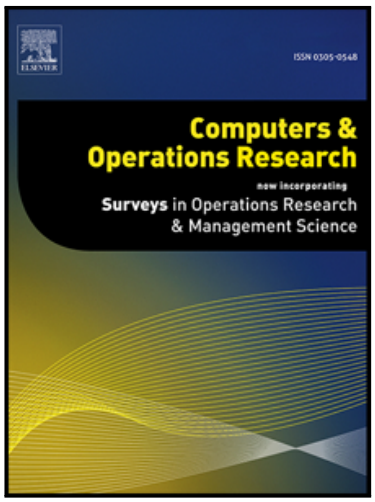

A CPU-GPU Local Search Heuristic for the Maximum Weight Clique Problem on Massive Graphs

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Highlights

- We propose a new neighborhood structure for the problem. The results demonstrate that our neighborhood structure is better than the current ones, and it has the additional benefit that it can be explored using a GPU-based massivelly parallel architecture.
- We are the first to study the use of a GPU on the problem. The results indicate that an up to 12x speedup can be achieved.
- We compare our heuristic with the state-of-the-art ones and show that, even when the heuristic executes without using a GPU, it outperforms them. Moreover, the results also indicate that GPULS