

The algorithm BIBOX is one from cooperative pathfinding's algorithms family. This algorithm is fast and suboptimal. Despite its speed, it has several non-deterministic decisions. One of the non-determinism is analyzed in this work and it's graph handle decomposition. The goal is to get different graph handle decomposition by analysis algorithm, which will have different effects on the running time and size of results of the algorithm, experimentally evaluate the performance of the algorithm on the selected handle decompositions and find handle decomposition, on which will be algorithm most efficient.