Orienteering with moving control points can be represented as a graph model with ranked vertices and oriented edges. The rank of vertex depends on the actual time. Searching for the most optimised walk through this graph is NP-complete problem which can be in real-time solved only with limiting conditions and using of heuristics. SMIK solver software provides implemented heuristics for searching the best walk in several ways. In the thesis we can find description of the problem and algorithms, programming documentation with description of used methods and comparation of results to the real competition.