

## Content

Introduction .....	6
1 Current state of scientific knowledge.....	7
1.1 New approaches in solving RCPSP.....	8
1.2 Subconclusion .....	11
2 The goals of the dissertation.....	12
2.1 Main goal.....	12
2.2 Subgoals .....	12
3 Methods of solving the problem, formulation of the problem and description of the proposed solution .....	13
3.1 Chosen methods of solving RCPSP .....	13
3.2 Formulation of the problem.....	14
3.3 Description of the proposed solution.....	18
4 Results .....	24
4.1 Tests A – Setting the parameters of the genetic algorithm.....	24
4.2 Tests B – Verification of the functionality of the created tool compared to another solution.....	25
4.3 Tests C – Using other fitness functions.....	27
4.4 Tests D – Compound fitness function (fitnessCombinator).....	28
5 Conclusion.....	29
References .....	30
List of papers published by author .....	35