Comparative Study of Metaheuristic Models for Solving Travelling Salesperson Problem

Sagnik Chakraborty, Bhaswar Chakraborty

Department of Computer Science

Abstract

Metaheuristic definition in short, TSP definition in short, metaheuristic models to be used in this project, program structure, comparative study, results summary.

Contents

1	Introduction	3
2	Background/Review of related work	4
3	Metaheuristics	4
4	Traveling Salesperson Problem	5
5	Metaheuristic Models 5.1 Ant Colony Optimization 5.1.1 Description 5.1.2 Mathematical Basis 5.1.3 Metaphor 5.1.4 Algorithm	6 7 7 7 7
6	Methodology 6.1 User Interface Description 6.2 Data-flow Diagram 6.3 System Design 6.3.1 Repository Description 6.3.2 Tech Stack 6.3.3 Assimilated Architecture	8 8 8 8 9 9
7	Results and Comparative Study	9
8	Implementation	9
9	Scope for Future Research and Conclusion	9
10	O References	9

1 Introduction

Short Introduction. Overall project within one/two page.

2 Background/Review of related work

3 Metaheuristics

Write about metaheuristics in detail here.

4 Traveling Salesperson Problem

Explain TSP in detail here.

5 Metaheuristic Models

Brief description of models that we use

- 5.1 Ant Colony Optimization
- 5.1.1 Description
- 5.1.2 Mathematical Basis
- 5.1.3 Metaphor
- 5.1.4 Algorithm

6 Methodology

6.1 User Interface Description

6.2 Data-flow Diagram

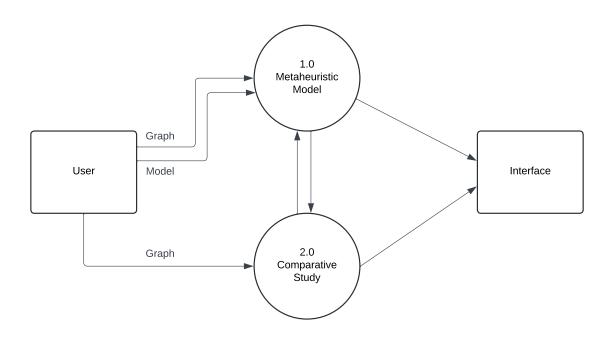


Figure 6.1: Level-0 Data Flow Diagram of the project

6.3 System Design

6.3.1 Repository Description

Tree. Short explanation of architecture

- 6.3.2 Tech Stack
- 6.3.3 Assimilated Architecture
- 7 Results and Comparative Study
- 8 Implementation
- 9 Scope for Future Research and Conclusion
- 10 References

Don't do it now