

Lecture 6: Solutions

MSE Algorithms - Metaheuristics



SOLUTION: Application of Crossover

Task 1: Order-1 and Partially Mapped Crossover

- a) Apply Order-1 Crossover to the following two permutations, swapping positions 4-7 (in blue).
- b) Apply Partially Mapped Crossover to the following two permutations, swapping positions 4-7 (in blue) .

P1: 1 4 2 **8 5 7 3** 6 9

P2: 7 5 3 **1 9 8 6** 4 2

Solutions:

- a) Order-1 Crossover

O1: 5 7 3 1 9 8 6 4 2

O2: 1 9 6 8 5 7 3 4 2

- b) Partially Mapped Crossover

O1: 7 4 2 1 9 8 6 3 5

O2: 1 9 6 8 5 7 3 4 2

Solutions: Solving TSP with Genetic Algorithm

Task 2: Genetic Algorithm for TSP

An implementation of GA for TSP can be found e.g. at:

<https://github.com/maoaiz/tsp-genetic-python>

Solutions: Solving TSP with GA

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Will be updated periodically until end of lecture								
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