Name: Michal Pluta User-name: vsdc48

Algorithm A: A\* Search (AS)

Algorithm B: Particle Swarm Optimisation (PS)

Description of enhancement of Algorithm A:

*Describe the* ***enhancements*** *you have made to your algorithms in the two boxes. You can vary the sizes of these boxes but do not change the font (Calabri), font size (11), the paragraph properties (single space) or the header and footer, and everything should fit onto one side of A4. Do not embed images. You should type into this Word document and save it as a pdf. You may include a commentary on the relative success of your enhancements if you wish and* ***your submitted codes should be well commented****. However,* ***full explanations of enhancements should be provided here*** *with code comments used to show where and how the enhancements are made.*

***Save the final document as a pdf.*** *(You can delete all these instructions.)*

Tried anytime A\*

Implement Randomised Weighted

MST heuristic

2-opt

Min-heap

Description of enhancement of Algorithm B:

Change of velocity function

2-opt

Varying inertia

Dazing

Nearest neighbour initialisation

Extinction events

Tried different topologies

Normalising velocity

***DESCRIPTION OF ALGORITHM ONLY IF THE ALGORITHM IS NOT COVERED IN LECTURES***

Description of *non-standard* Algorithm A:

*Describe any non-standard algorithms you have implemented that* ***have not been covered in lectures*** *(otherwise these boxes should be blank) You need to convince me that your implementation is indeed that of the named algorithm and you need to* ***provide a full reference to the source for your algorithm****. You should* ***include a pseudocode description****. You can vary the sizes of these boxes but do not change the font (Calabri), font size (11), the paragraph properties (single space) or the header and footer and everything should fit onto one side of A4. (You can delete these instructions.)*

***Remember: You need my express permission to implement a non-standard algorithm!***

Description of *non-standard* Algorithm B:

*Type here, as above.*