

Visualising Ant Colony Optimisation

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A final year Major Project



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Abstract

Ant Colony Optimisation and its variations are commonly used swarm intelligence methods, however the underlying concepts can be difficult to comprehend for people who have recently come across the subject area. The majority of existing resources either inadequate visual representations or rely on the user having some prior knowledge about the underlying behaviours. The author of this project aims to create an application for deployment in educational environments allowing for a richer, more interactive experience in regards to the teaching of Ant Colony Optimisation methods. The author has set out to achieve a full visual representation of the algorithm's execution as well as providing an intuitive user interface allowing for user defined algorithm parameters and a choice of algorithm types and modifiers.