

Solving Travelling Salesman Problems with Genetic Algorithms

Samuel Jackson, University of Aberystwyth

I. INTRODUCTION

A genetic algorithm (GA) is a search and optimisation method frequently used to find approximate solutions in challenging problem domains. Genetic algorithms are inspired by the biological concept of natural selection. This places genetic algorithms under the category of biologically inspired approaches to optimisation; along with genetic programming, ant colony optimisation, and particle swarm optimisation.

II. PROGRAM DESCRIPTION

III. REPRESENTATION DISCUSSION

IV. GENETIC OPERATORS DISCUSSION

V. EXPERIMENTS PERFORMED

VI. DISCUSSION AND ANALYSIS

VII. CONCLUSIONS AND FUTURE WORK