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Genetic Algorithms

Student:
Ernesto Céspedes Montero, Ricardo Chacón Carvajal, Luis Sergio Yannicelli Vargas

Email: *netosoy@gmail.com, vrlrdo@gmail.com, lsyannnicelli@gmail.com*

1 Introduction

In the present days, technologic growth specially in the programming field, represents and important issue, taking big part on solving a variety of topics, implementing algorithms as a tool. * Genetic algorithms are evolutionary algorithms, more broadly belonging to the Biologically Inspired Computation, useful for optimization problems. Its structure is inspired firmly on the field of genetics and Mendelian biology, specifically populations, gene frequency, chromosomes, genes, alleles, and so on in terms related to genetics; on the other hand it applies genetic processes such as evolution, recombination, mutation, heredity and others to improve the algorithm's efficiency for its goal which is combinatorial optimization.

2 Objectives

2.1 General Objective

To implement a C++ library of genetic algorithms.

2.2 Specific Objectives

Specific Objectives are:

1. To understand genetics algorithms method as evolutive algorithm.
2. To describe genetic algorithms method and some aplications in which this algorithm could be efficient.
3. To implement an C++ library of genetic algorithms.

3 Methodology

References

[1] Consultado el 25 de marzo de 2014, en: http://dalila.sip.ucm.es/ manuel/Informatica/FloydWarshall.pdf

[2] Consultado el 25 de marzo de 2014, en: http://www.fing.edu.uy/inco/grupos/bioinf/bioinfo1/teorico/grafos.pdf