

Applications of Genetic Algorithms

By Harry Beddo

TJHSST Computer Systems Lab 2006 - 2007

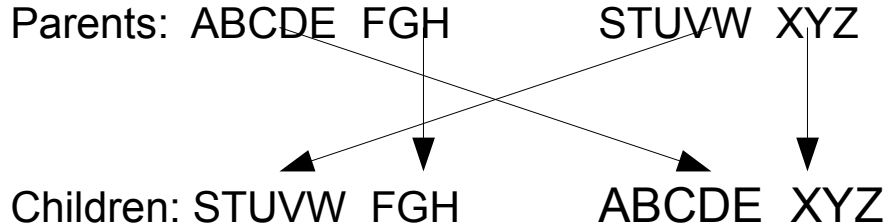
ABSTRACT

In a large set of data, it takes time and effort to search through the whole set. Genetic Algorithms help solve this problem by finding the solution without checking the whole set. The program has three different programs that each implement GA to find an optimal solution.

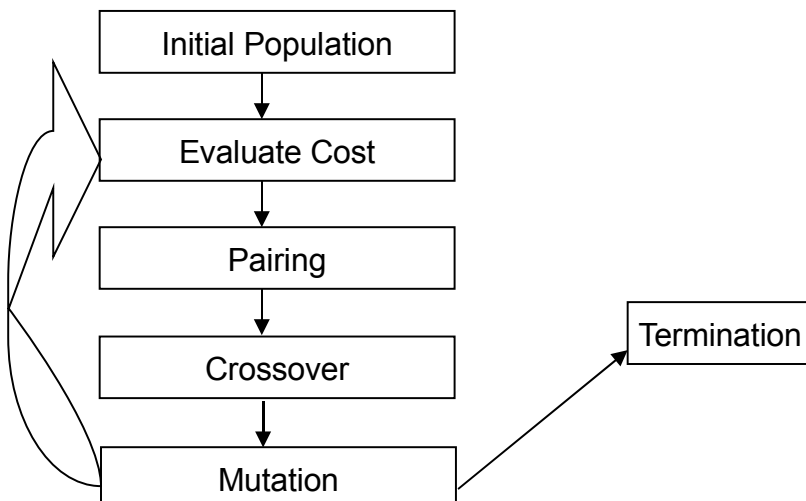
BACKGROUND

The purpose of these programs is to apply genetic algorithms to find solutions to different problems. Genetic algorithms are a search technique that is used to find an approximate and sometimes correct answer. Usually the data being searched through is very large and the GA will be able to find a close answer. The GA imitates evolutionary biology by using generations of populations to create better generations until the optimal solution is found.

CROSSOVER



PROCEDURE



CONCLUSION

The overall purpose of these programs is to find an optimal solution without checking all of the data. In each of these programs, the data set was huge and the genetic algorithm found an approximate or true answer without needing to check every individual piece of datum in the set.