Abstract

In Artificial Bee Colony (ABC) optimization, we find better solution by employing neighbourhood search strategy using the current solutions. Researchers have tested ABC in many practical optimization problems. In this paper, we propose an application of ABC for the pairwise DNA sequence alignment in order to observe its performance in bioinformatics computation. We compare our results with the pairwise alignment algorithm FASTA. The results are encouraging. We also demonstrate ABC on Graph Coloring problem using different traversing strategies.

References

Pairwise Alignment using ABC Optimization

1999.

Index Terms

Computer Science Information Sciences

Keywords

Graph Coloring problem, Artificial bee colony optimization, DNA pairwise sequence alignment.