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OPTIMIZATION APPLICATIONS USING MFO ALGORITHM: A REVIEW

Sidharath Rana
Student, Dept.of ECE,
Ludhiana College of Engineering & Technology Katani Kalan,
Ludhiana, Punjab, India

Ramanjeet Singh
Assistant Professor, Dept.of ECE,
Ludhiana College of Engineering & Technology Katani Kalan,
Ludhiana, Punjab, India

Dr. Munish Rattan
Assistant Professor, Dept.of ECE,
Guru Nanak Dev Engineering College, Ludhiana, Punjab, India

Abstract— **It only tells the behaviour of optimization i.e. MFO algorithm. Its only benefit is to finding the best way of small insects in environment called orientation. These insects mainly fly in night by maintaining proper path with the moon. Hence its very useful method to travel at long distances. They mainly trapped in a type of cage i.e. artificial lights. It tells the Performa of the optimization. It only shows two types of results i.e. possible and convenient. Further it also helps to solve the upcoming impossible questions which must apply in future technology.**

keywords— **Optimization, MFO Algorithm, and Nature inspired computing**

I. INTRODUCTION

Optimization is a method to finding best positive solutions for some problem. Ratio of problems must increased , over last few researches, and the need of a new optimization technique is necessary as compare to previous. Mathematics optimizations techniques are use to be only tools in optimizes the problems arises in upcoming for other optimization methods. These processes likely not run which suffers by some problems. Most of them are like, GA based methods that requires a proper solution in search space. That make them more large inefficient for find and solve real problems. That's why they known as Genetic Algorithm (GA), which is now a day's famous method to solve equations, which eliminate errors from algorithms. Possibility must effects in the material of this method. The selected, re-produced, of all stochastic behaviors in which it assist and neglect negative value which is reliable in mathematically operations. Both the values of functions are much more efficient from previous functions, then outcome populations must improve. Now it has two simple solutions which might be key reasons in the successfulness to solve the tough values. We find in GA that, it only minus the value individually. That helps the algorithm in modification for solving possible problems. Now days the features of GA can be find in a large range of technology. The applications of that type of algorithms must be founded in several different streams of science. Rather the hitlist must arises , Is other method to solve toughest equations?. It meant it must performs better in set of problems & fails in solving other sets of problems. The average performances of optimizes must equally considered all other equations. Some little minor errors are there that have minimum solution as compared to present work. It is a motivated to do efficient work, in which it must apply and match with present work.

II. PSEUDO CODE

- OFunction = (@)Cost Of Function
- Dimensions = Your Variables Has Numbers
- Iteration At Max = Generation At Max Number
- Number Of Agents Search = Search Agents Has Numbers
- Lower Bound=(LB1,LB2,.....,LBn) Lower Bound Of Variable N Is LBn
- Upper Bound=(UB1,UB2,.....,UBn) Upper Bound Of Variable N Is UBn
- When All Variables Has Equal Lower Bound Then You Can
- Must Define Two Single Numbers i.e. LB AND UB

III. MOTH FLAME OPTIMIZER

Moths are insects, which have similarity as of butterflies. Nearby 160,000 many other varieties of this insects in environment. It mostly carry components in it. First it must convert into moths in cocoons. Other fact about moths is

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that, they have specialty i.e. navigation method in dark. It used a other method called transverse orientation for navigation. Moth flies by compare fix angles with respect to moon, a very efficient method to travel far away distances in a forward path Fig.1 shows models of reverse orientations. We know that the moon so much high range, and only one way to move in one direction. Similar technique also possible from human being. Just think that moon is a south side and a person wanted to go east. If person keep the moon on his left side while walk, they must run in opposite path. We see that the moths will flying spirally around lights.

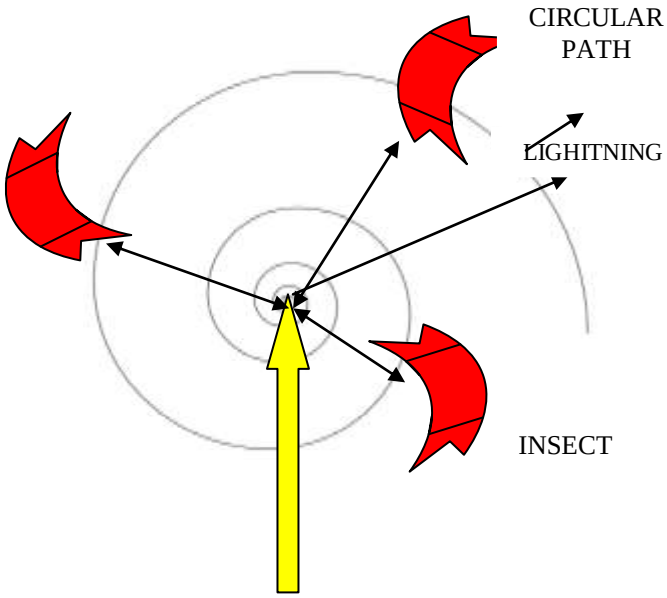

Fig . 1 Moth Flame Optimization

IV. OPTIMIZATION USING MFO ALGORITHM

In this it has combined quality which must used in optimizer. They divides it in different forms. In this, some other ways to handle constraints i.e. repair algorithms. Some of method not finds the proper solutions and converts optimization to the other optimization technique. It is simple method, that assure function. It automatic include improper answers in algorithms. Main positive feature is of easy & minimum value. It doesn't utilize information which must helps for find solutions.

V. APPLICATIONS

1. MFO has high convergence accuracy and good global optimization ability in optimization problem for week dimensional function extreme, which is superior to PSO algorithm.
2. Accuracy of MFO algorithm is more higher than PSO algorithm.
3. MFO algorithm has good robustness, fast convergence speed and global optimization.
4. By using MFO algorithm, we can have an effective method to estimate the parameters of confined aquifer, and also effectively conduct parameter inversion for underground water model.

VI. CONCLUSION

In this , it concludes that the moths which are insects , they can fly in night time spirally when moon flashes its light on them. They attracts towards the artificial lights which are not necessary. In this mainly test will conduct i.e. test, classical and CFD function. There results are also compared with other algorithms results for verify the solutions. Mainly this will have high & large functions .

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