Bee Algorithm Program with New Dataset

Member

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New Dataset

Predict lifespan of a comet goldfish

id
avg_lenght
avg_weight
habitat
ph_of_water
color
gender
life_span

New Dataset

Predict lifespan of a comet goldfish
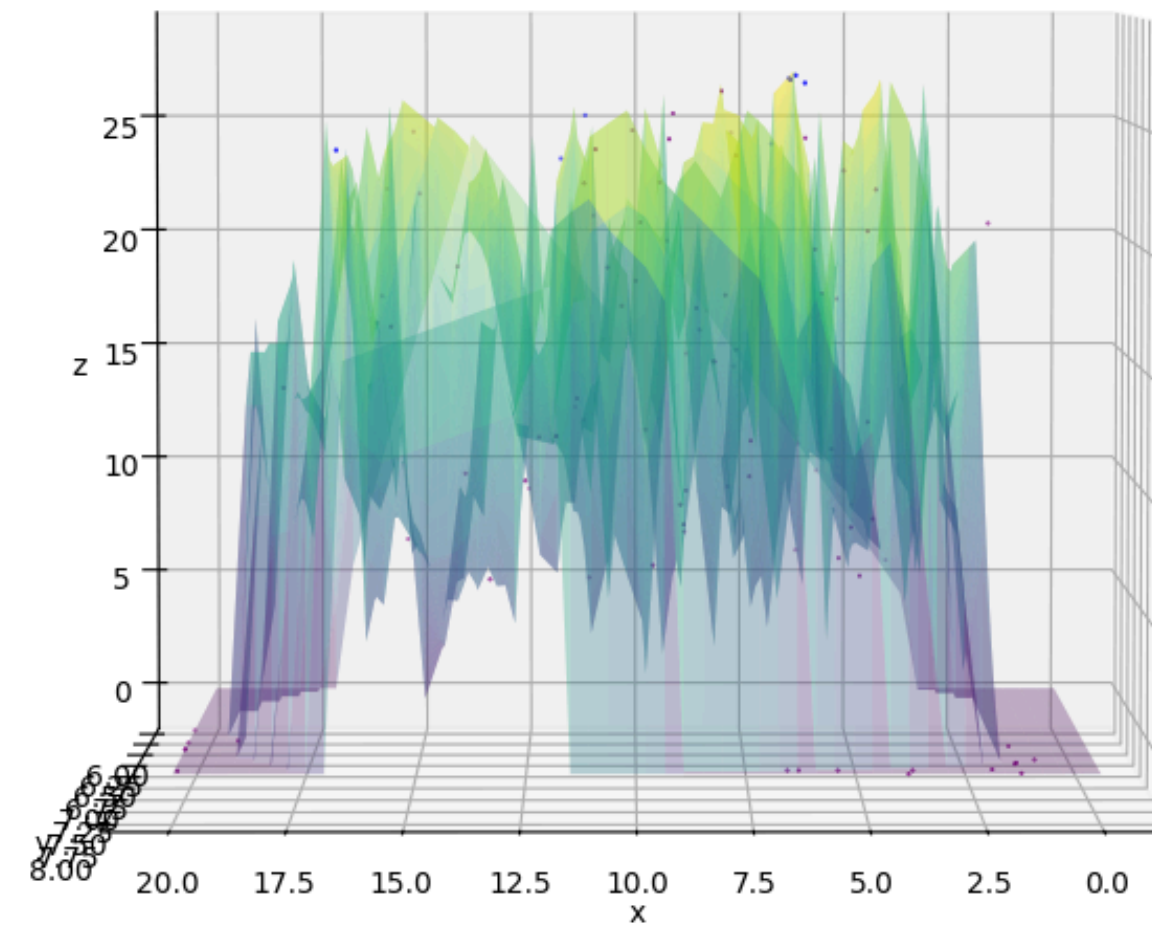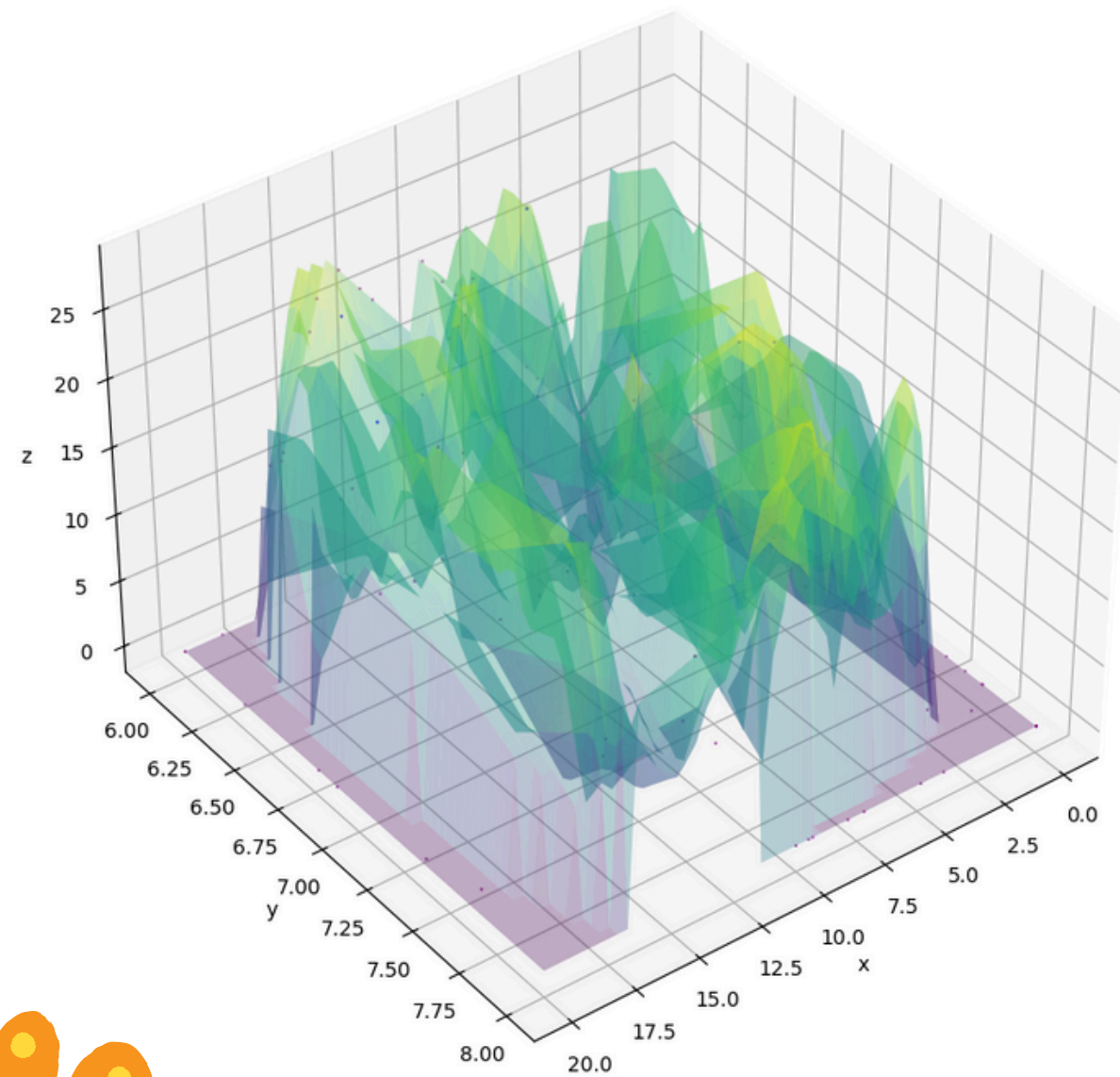
id

avg_lenght

avg_weight

habitat

ph_of_water

color

gender

life_span

Result

Best Solution S=26.237039967386277 [6.98061699 7.28794146]

Result

```
Function Ackley ----------------------------------------
Run       Iteration       Score
============================
0         139             27.999427056393216
1         98              27.99991815025626
2         703             27.99928504957254
3         216             27.999157039752564
4         60              27.99928158451592

Iterations Average 243.2 Standard Deviation 235.65177699308782
Score Average 27.999413776098102 Standard Deviation 0.00026628118279721356
Elapsed time: 00:18:32


Function Griewank ----------------------------------------
Run       Iteration       Score
============================
0         318             27.999524076518977
1         168             27.999559614442738
2         57              27.999515365690065
3         437             27.999175087027734
4         87              27.999253130494523

Iterations Average 213.4 Standard Deviation 143.83129005887417
Score Average 27.99940545483481 Standard Deviation 0.00015886391406179956
Elapsed time: 00:17:11
```

```
Function Schwefel ----------------------------------------)
Run       Iteration       Score
============================
0         45              27.999148799462766
1         50              27.999106544341167
2         48              27.99900635684201
3         37              27.99948616229295
4         37              27.999185658597305

Iterations Average 43.4 Standard Deviation 5.4626001134990645
Score Average 27.999186704307238 Standard Deviation 0.0001612847074409922
Elapsed time: 00:03:39


Function Easom ----------------------------------------
Run       Iteration       Score
============================
0         41              27.999120914338164
1         46              27.999413440648528
2         42              27.999101115967495
3         43              27.99960332935487
4         37              27.99925197838138

Iterations Average 41.8 Standard Deviation 2.925747767665559
Score Average 27.999298155738085 Standard Deviation 0.000190099487185692992
Elapsed time: 00:03:25
```

Result

Function	Score Average	Standard Deviation	Iterations Average
Schwefel	27.99918	0.000161	43.4
Easom	27.99929	0.000189	41.8
Ackley	27.99941	0.000266	243.2
Griewank	27.99940	0.0001589	213.4

Result - Score Average

Function	Score Average	Standard Deviation	Iterations Average
Schwefel	27.99918	0.000161	43.4
Easom	27.99929	0.000189	41.8
Ackley	27.99941	0.000266	243.2
Griewank	27.99940	0.0001589	213.4

Result - Stand Deviation

Function	Score Average	Standard Deviation	Iterations Average
Schwefel	27.99918	0.000161	43.4
Easom	27.99929	0.000189	41.8
Ackley	27.99941	0.000266	243.2
Griewank	27.99940	0.0001589	213.4

Result - Iterations Average

Function	Score Average	Standard Deviation	Iterations Average
Schwefel	27.99918	0.000161	43.4
Easom	27.99929	0.000189	41.8
Ackley	27.99941	0.000266	243.2
Griewank	27.99940	0.0001589	213.4

Result - Best Result

Function	Score Average	Standard Deviation	Iterations Average
Schwefel	27.99918	0.000161	43.4
Easom	27.99929	0.000189	41.8
Ackley	27.99941	0.000266	243.2
Griewank	27.99940	0.0001589	213.4