

Genetic Algorithms

Parameter Analysis

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What is the best size for the tournament selection?

Many work say 2 (or a small value), but why?

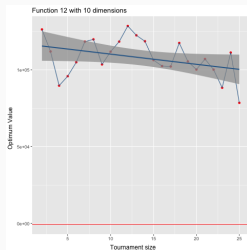
- Exploitation X Exploration: No variation
- No recent experiments or theory

Papers with small values	Papers explaining why
13	0

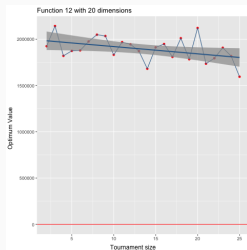
Parameter Analysis - GA

Is 2 really the best size for Tournament?

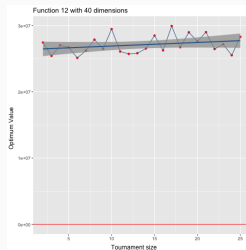
We experimented many sizes on many benchmark functions



(a) 10 dimensions.



(b) 20 dimensions.



(c) 40 dimensions.

Figure 1: Average performance on different tournament size for the F12 function.

- But we could not find any strong relationship!
- Come to our poster to know more