

"Feb 2016"

Effects of fitness selection strategies

Raw Fitness

Raw Fitness (higher preferred)		Roulette Wheel				Sigma scaling		Boltzman					
A (gen=0)	B (gen=50)	$f(x) = x^2$		$f(x) = x^2$		A, B	%	T=1	T=2				
		A	A	B	B			A, B	%	A, B	%		
1	9	99	41%	57%	26%	27%	1.764	44%	3.78	94%	2.95	74%	
2	6	96	27%	25%	25%	25%	1.109	28%	0.19	5%	0.66	16%	
3	4	94	18%	11%	25%	24%	0.672	17%	0.03	1%	0.24	6%	
4	3	93	14%	6%	24%	24%	0.454	11%	0.01	0%	0.15	4%	
sum=22		sum=382											

Raw Fitness

Raw Fitness		Ranked				Tournament		
A (gen=0)	B (gen=50)	Rank	Reverse rank	Min=1, Max=4 A, B	Min=0, Max=3 A, B	tsize=2 A, B	tsize=3 A, B	
1	9	99	1	4	40%	50%	50%	75%
2	6	96	2	3	30%	33%	33%	25%
3	4	94	3	2	20%	17%	17%	0%
4	3	93	4	1	10%	0%	0%	0%
avg=5.5		avg=95.5		sum=10		avg=25		

Note:

% is percentage of Roulette Wheel.
Tournament % is an approximation.