

Simple genetic algorithm

individual ... $\{0,1\}^n$

$P \leftarrow$ initial population

while not happy

$O = \{ \}$

for ...

$p_1 \leftarrow \text{select}(P)$

$p_2 \leftarrow \text{select}(P)$

$o_1, o_2 \leftarrow \text{crossover}(p_1, p_2)$

$o_1 \leftarrow \text{mutation}(o_1)$

$o_2 \leftarrow \text{mutation}(o_2)$

$O = O \cup \{o_1, o_2\}$

roulette wheel selection $\rightarrow \text{prob}(i) = \frac{f(x_i)}{\sum_j f(x_j)}$

this is called offspring

this is what makes it capable of finding better solutions.

better individuals should be chosen more often

mixing genes with both parents

randomly flips some bits in population

add to the offspring

Lápothy:

Műsím dőlt 36b, alych dőlt 21péct.

Deadlines are only recommended.