

FORMAÇÃO INTELIGÊNCIA ARTIFICIAL E MACHINE LEARNING

ALGORITMOS GENÉTICOS
EXEMPLO PASSO A PASSO

Prof. Fernando Amaral – Todos os Direitos Reservados

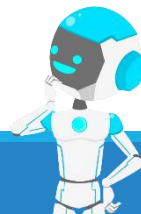
Exemplo

- Objetivo

1 1 1 1 1 1 1 1

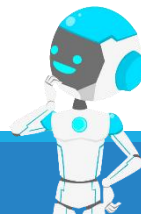
Função

$$F = \sum_{l=1}^N G$$

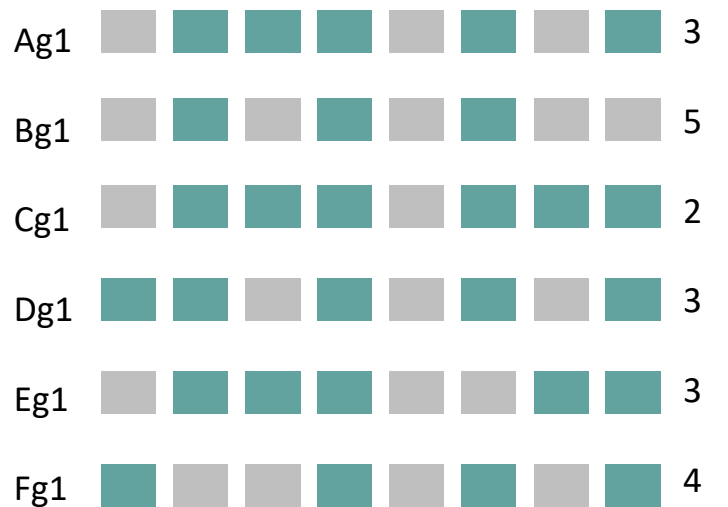


Inicialização

Ag1								
Bg1								
Cg1								
Dg1								
Eg1								
Fg1								



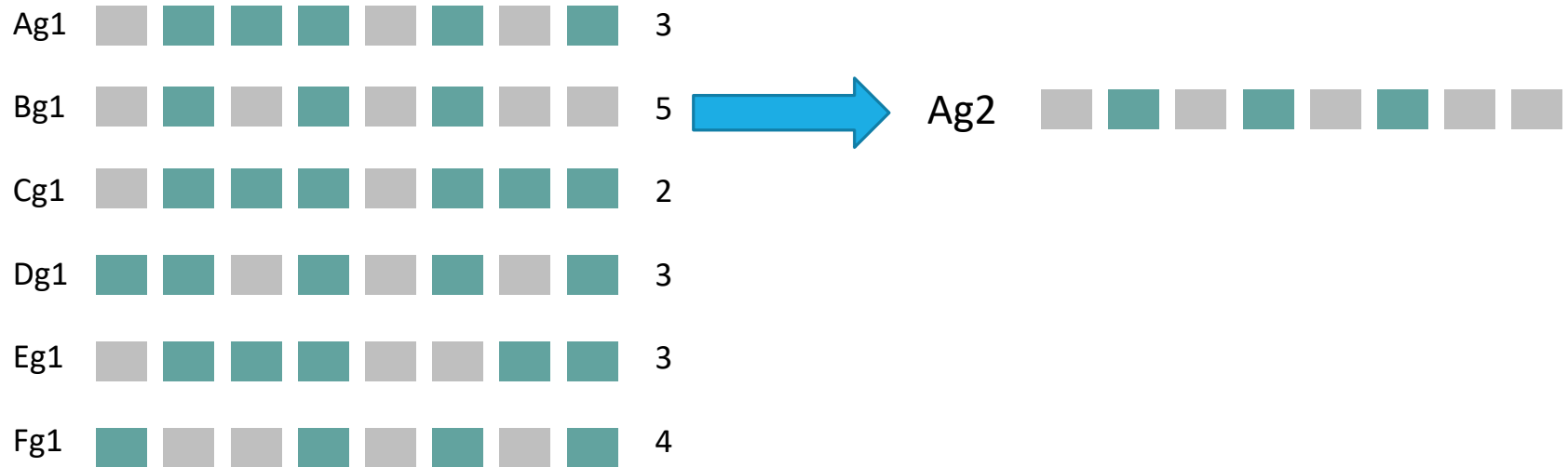
Mede a Adaptação



Adaptação = 20



Elitismo



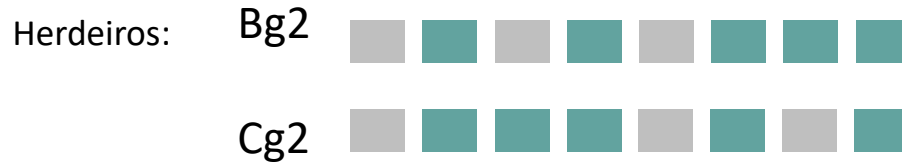
Crossover

Roleta

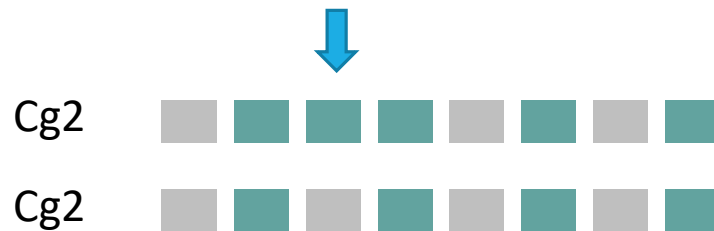


Crossover: ponto único

Bg1 x Cg1



Mutação



Crossover: ponto único

Bg1 x Fg1



















































Herdeiros: Dg2 gray teal gray teal gray teal gray teal

Eg2 gray teal gray teal teal gray gray teal



Nova Geração

Ag2									5
Bg2									3
Cg2									4
Dg2									4
Eg2									4
Fg2									3

Adaptação = 23

Melhora: 15%

