

Outline of a Genetic Algorithm

1. Create a population of random genomes



2. Evaluate the fitness of each genome in the population

3. Build a new population of genomes:



(a) **select** 2 genomes probabilistically, based on fitness

(b) create 2 new offspring from them, using **crossover**

(c) **mutate** each offspring with some small probability

(d) add the offspring to the new population

continue steps (a) - (d)

4. When the new population has reached the same size as the current population, replace the current population by the new population ... and repeat