Evolutionary Computation

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Biologically-Inspired Intelligent Systems
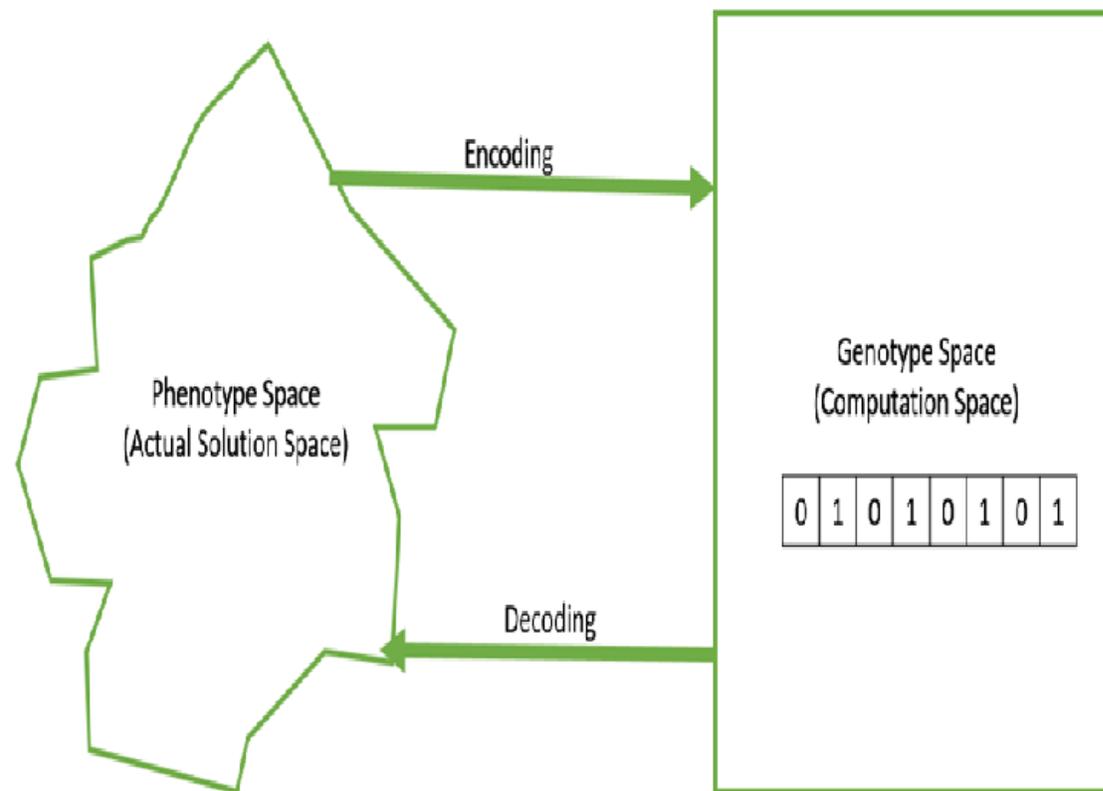
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Genetic Algorithm (GA) Requirements

- Typical genetic algorithm requires two things to be defined:
    - A genetic representation of solution domain
    - A fitness function to evaluate solution domain

- A standard representation of the solution = array of bits
    - Arrays of other types/structures can be used in essentially same way
- Main property that makes these genetic representations convenient is: their parts are easily aligned due to their fixed size, that facilitates simple crossover operation
- Variable length representations may also be used
    - But crossover implementation is more complex in this case

Genetic Algorithms (GAs)

Questions?