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# Evolutionary Algorithms

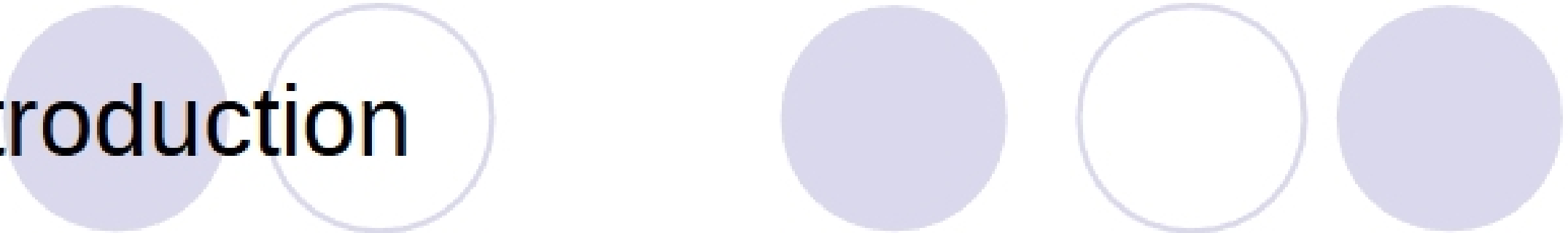
Presented by  
Muhannad Harrim



# Overview

- This presentation will provide an overview of evolutionary computation, and describe several evolutionary algorithms that are currently of interest.
- Important similarities and differences are noted upon all the distinct themes of the evolutionary algorithms which lead to a discussion of important issues that need to be resolved, and items for future research.

# Introduction



- Evolutionary computation uses the computational model of evolutionary processes as key elements in the design and implementation of computer-based systems and problem solving applications.
- There are a variety of evolutionary computational models that have been proposed and studied which we will refer to as evolutionary algorithms.
- They share a common conceptual base of simulating the evolution of individual structures via processes of selection and reproduction.
- They depend on the performance (fitness) of the individual structures.