

Check Points: Multi-objective Evolutionary Optimization

You should be able to answer these questions without looking at the slides.

- What is fitness sharing used for and how is it computed?
- Definitions of single-objective, multimodal, multi-objective functions
- Under what conditions a solution A dominates a solution B?
- What is a Pareto Frontier?
- How does Objective Weighting work in single-objective optimization?
- What are the limitations of Objective Weighting?
- What are the three steps of NSGA-II? (front identification, crowding distance, elitism)
- How does tournament selection work in NSGA-II?
- How does Viability Evolution work?
- What is Memetic Evolution?