

CMPE538 Evolutionary Multi-Objective Optimization

Assignment

Q1. In this Assignment you should use ZDT1, ZDT2, ZDT3, ZDT4 and ZDT6 Benchmark problems and create the following tables for the give MOGA.

For D=10, Calculate GD values for each problem by using only 200000 function Evaluation.

Problems	MOGA
ZDT1	
ZDT2	
ZDT3	
ZDT4	
ZDT6	

For D=30, Calculate GD values for each problem by using only 200000 function Evaluation.

Problems	MOGA
ZDT1	
ZDT2	
ZDT3	
ZDT4	
ZDT6	

For D=10, Calculate IGD values for each problem by using only 200000 function Evaluation.

Problems	MOGA
ZDT1	
ZDT2	
ZDT3	
ZDT4	
ZDT6	

For D=30, Calculate IGD values for each problem by using only 200000 function Evaluation.

Problems	MOGA
ZDT1	
ZDT2	
ZDT3	
ZDT4	
ZDT6	

Bonus: Update MOGA by using any technique to improve GD and IGD values. Explain your update in detail.

Due Date: 08 June 2026