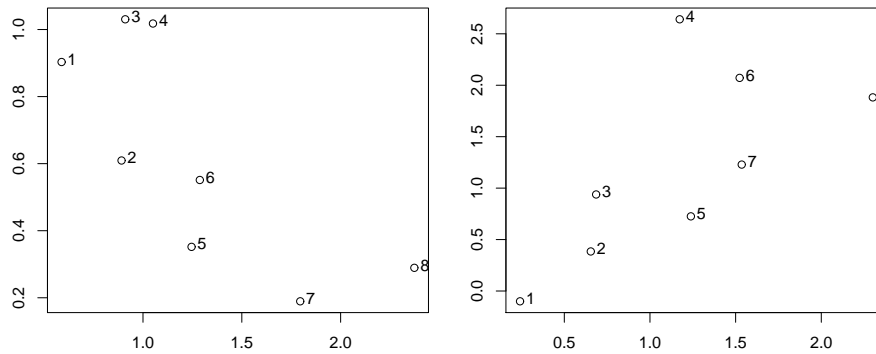


INF3490 exercises - week 3 2015

Problem 1



For each of the two figures above, find the Pareto optimal set when

- Minimizing both f_1 and f_2
- Minimizing f_1 , maximizing f_2
- Maximizing f_1 , minimizing f_2
- Maximizing both f_1 and f_2

Problem 2

In the two figures above, what would be the maximum point when using weighted sum with the weights

- $w_1 = 1, w_2 = 1$
- $w_1 = -1, w_2 = 1$

Problem 3

Why can hybrid algorithms make it harder to maintain diversity?

Problem 4

Why is it usually better to use the number of fitness function evaluations as a time measure, rather than the number of generations, or the amount of CPU time spent?