

Surprises in Evolutionary Computation (EC)

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1 What am I interested in EC?

Hard optimisation problems - constraints?

Auto-adaptation of EC algorithms.

Out-of-the-box ideas - surprises.

2 What have I done?

MOEA/D with randomly selected solutions: **Surprise**, final results faster and better.

Networks to describe paths of EC: **Surprise**, they look beautiful!

Dealing with constraints in hard problems: **Surprise**, accepting constraint violation can be good!

3 What am I doing?

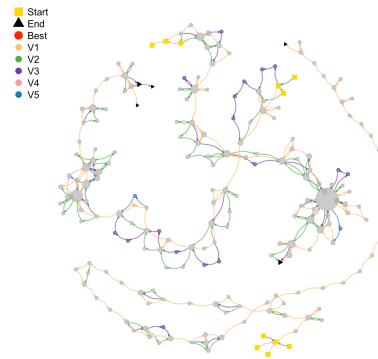
Uncertainty in optimisation.

Improve other EC by selecting solutions randomly.

Select solutions randomly vs Adding new solutions.

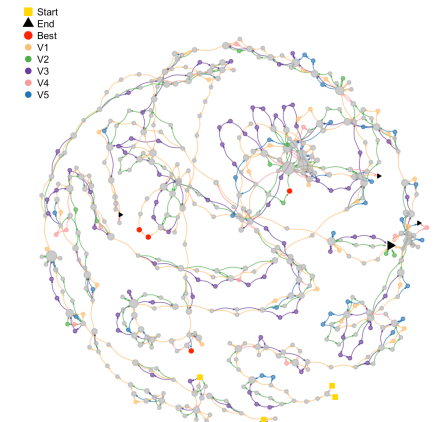
Figures

Nodes: 210 Edges: 403 Comp: 3 # Shared n.: 184
PO sol: 0

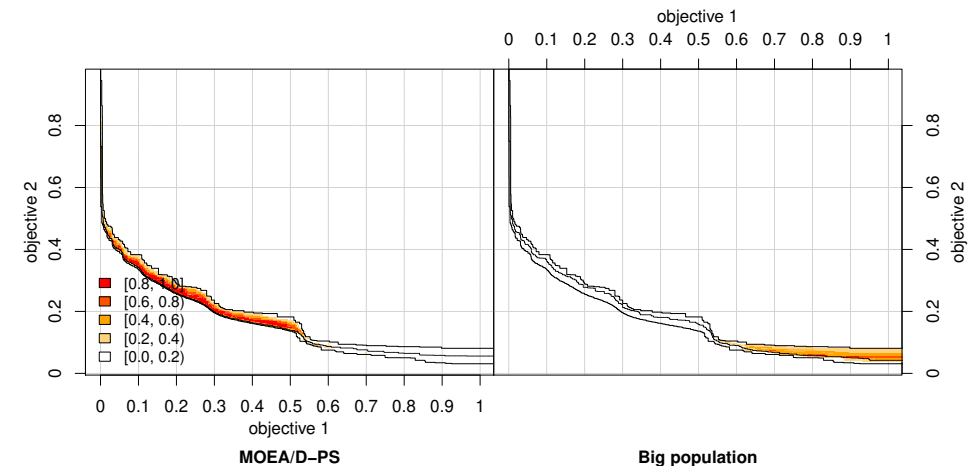


MOEA/D-PS

Nodes: 529 Edges: 866 Comp: 3 # Shared n.: 372
PO sol: 4



MOEA/D



← My page!