

## MOEA/DFD results on CEC09 problems

Description:

- Table 1 shows the mean IGD of two algorithms (MOEAD[1] & MOEA-DFD[2]) for 30 runs on CEC09 problems (UF1-UF6).
- Both algorithms are implemented in C++. Zhang's implementation at [3] is modified for implementing the MOEA/DFD algorithm.
- MOEA/DFD is derived from MOEAD and is implemented in 'algorithm.h'.
- Parameters that are used are those provided by zhang's implementation [3] that were also used by the authors of MOEA/DFD algorithm.

Algorithm	UF1	UF2	UF3	UF4	UF5	UF6
MOEA/D-DRA	0.00232	0.00162	0.00475	0.00259	0.18725	0.01112
MOEA/DFD	0.03336 (-)	0.04355 (-)	0.04345 (-)	0.08104 (-)	0.37235 (-)	0.30030 (-)

**Table 1: Mean IGD for 30 Runs**

### References

[1] Zhang, Q., et al. "The Performance of a New Version of MOEA/D on CEC09 Unconstrained MOP Test Instances." IEEE Congress on Evolutionary Computation, 2009

[2] Nasir, M.; Mondal, A.K.; Sengupta, S.; Das, S.; Abraham, A., "An improved Multiobjective Evolutionary Algorithm based on decomposition with fuzzy dominance," in Evolutionary Computation (CEC), 2011 IEEE Congress on , vol., no., pp.765-772, 5-8 June 2011

[3][http://dces.essex.ac.uk/staff/zhang/MOEAccompetition/CEC09final/code/ZhangMOEADcode/moead\\_cec2009\\_2011version.zip](http://dces.essex.ac.uk/staff/zhang/MOEAccompetition/CEC09final/code/ZhangMOEADcode/moead_cec2009_2011version.zip)