



Figure 1: Full Walsh decomposition of the Onemax function.

1 Summary

All with p inputs

Function	Domain	Highest Order	Coefficients	Local Optima
One Max	{0,1}	1	p	1
K-Ones				
Hamming Similarity				
Checkerboard				
Bivariate quadratic				
NK Model				
Knapsack packing				
K Bit Trap				
Ising spin glass in 2D or 3D				
MaxSat				
Binary Linear Programming				

- 2 OneMax
 - 2.1 Description
 - 2.2 Weights
 - 2.3 Walsh Structure
- 3 K-Ones
- 4 Hamming similarity
- 5 Checkerboard
- 6 Bivariate quadratic
- 7 NK Model
- 8 Knapsack packing
- 9 K Bit Trap
- 10 Ising spin glass in 2D or 3D
- 11 MaxSat
- 12 Binary Linear Programming