

class BooleanFunction

1. Random Boolean Function Generators

random_non_degenerated_function(n, bias)
random_k_canalizing_function(n, k)
random_NCF(n, layer_structure)
...

class BooleanNetwork

2. Random Boolean Network Generators

Generate random Boolean networks of defined size, degree distribution, canalizing depth or layer structure, bias, ...

5. Ensemble experiments

Build reproducible pipelines for systematic studies: vary parameters and study function and network properties across ensembles

6. Interoperability

Export/Import → CANA, PyBoolNet, ...

3. Boolean Function Analysis

is_monotonic() get_symmetry_groups()
is_degenerated() get_sensitivity()
is_k_canalizing() get_layer_structure()
is_kset_canalizing() get_canalizing_strength()
...

4. Boolean Network Analysis

get_steady_states_asynchronous()
get_Derrida_values()
get_attractors_and_robustness_measures_synchronous()
...

