Benchmarks for Projected Model Counting

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Our benchmarks submission for the Projected Model Counting competition 2020 consists of 2-QBF track benchmarks from QBFeval competition [1,2], formulated initially in QDIMACS format. We synthesize AIG from QDIMACS format, which in turn were translated to DIMACS format using the ABC [3] tool. The variables corresponding to AIG are considered as set of projected variables.

The experiment result shows that these benchmarks are hard to sample, and counting for benchmarks is employed in the generation of samples.

The submission consists of 161 projected CNF formulas in DIMACS format. This consists small, medium and large formulas as the range of clauses is 150-9000 and the range of variables is 120- 5000.

References

1. QBF solver evaluation portal 2017, http://www.qbflib.org/qbfeval17.php
2. QBF solver evaluation portal 2018, http://www.qbflib.org/qbfeval18.php
3. Logic, B., Group, V.: ABC: A system for sequential synthesis and verification, http://www.eecs.berkeley.edu/~alanmi/abc/