

Candy for SAT Race 2019

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Abstract—We use Candy as a platform to systematically analyse the properties of competing strategies in a portfolio.

I. SUMMARY

Candy [1] is a fork of **Glucose 3** [5], [6]. One goal was to provide a flexible and efficient architecture to experiment with many different strategies. Candy orchestrates a set of loosely coupled systems, which mainly provide an interface for competing strategies. For example, Candy provides a variety of strategies in the branching-system.

II. IMPLEMENTATION

Among others, the branching system can resort to implementations of gate-analysis and random-simulation based *implicit learning* (RSIL) which uses the algorithms which we presented in [7] and [8].

Now, there exists also a parallel mode with selected combinations and configurations of strategies and efficient memory sharing.

III. INTERFACES

Candy provides an IPASIR interface [3] and an interface to the generic massively parallel SAT solver HordeSAT [2]. The sonification interface makes solver runs even audible [4].

IV. CANDY IN SAT RACE 2019

We submitted Candy in its default setting which is a configuration of strategies that is roughly similar to that inherited from Glucose 3. This is the public evaluation of our baseline performance for reference.

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