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6 Years of SMT-COMP

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Abstract The annual Satisfiability Modulo Theories Competition (SMT-COMP) was initiated in 2005 in order to stimulate the advance of state-of-the-art techniques and tools developed by the Satisfiability Modulo Theories (SMT) community. This paper summarizes the first six editions of the competition. We present the evolution of the competition's organization and rules, show how the state of the art has improved over the course of the competition, and discuss the impact SMT-COMP has had on the SMT community and beyond. Additionally, we include an exhaustive list of all competitors, and present experimental results showing significant improvement in SMT solvers during these six years. Finally, we analyze to what extent the initial goals of the competition have been achieved, and sketch future directions for the competition.

Keywords SAT Modulo Theories · Competition · Experimental evaluation

1 Introduction

Domain-specific reasoning has emerged in the past decade or so as crucial for the success of automated reasoning tools for real-world applications [42]. Consider

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