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Theory and Applications of Satisfiability Testing

8th International Conference, SAT 2005
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Preface

The 8th International Conference on Theory and Applications of Satisfiability Testing (SAT 2005) provided an international forum for the most recent research on the satisfiablity problem (SAT).

SAT is the classic problem of determining whether or not a propositional formula has a satisfying truth assignment. It was the first problem shown by Cook to be NP-complete. Despite its seemingly specialized nature, satisfiability testing has proved to extremely useful in a wide range of different disciplines, both from a practical as well as from a theoretical point of view. For example, work on SAT continues to provide insight into various fundamental problems in computation, and SAT solving technology has advanced to the point where it has become the most effective way of solving a number of practical problems.

The SAT series of conferences are multidisciplinary conferences intended to bring together researchers from various disciplines who are interested in SAT. Topics of interest include, but are not limited to: proof systems and proof complexity; search algorithms and heuristics; analysis of algorithms; theories beyond the propositional; hard instances and random formulae; problem encodings; industrial applications; solvers and other tools.

This volume contains the papers accepted for presentation at SAT 2005. The conference attracted a record number of 73 submissions. Of these, 26 papers were accepted for presentation in the technical programme. In addition, 16 papers were accepted as shorter papers and were presented as posters during the technical programme. The accepted papers and poster papers cover the full range of topics listed in the call for papers.

We would like to thank a number of people and organizations: Ian Miguel, the Local Chair who helped us organize the conference remotely; our generous sponsors who helped us to keep costs down, especially for students; Daniel Le Berre and Laurent Simon for once again organizing the SAT Solver Competition; and Massimo Narizzano and Armando Tacchella for the QBF Solver Evaluation. We would also like to thank the members of the Programme Committee and the additional referees who contributed in the paper-reviewing process.

St Andrews
June 2005

Fahiem Bacchus, Toby Walsh

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