Preface

This volume contains the proceedings of the conference on *Computer Aided Verification* (CAV 2003) held in Boulder, Colorado, on July 8–12, 2003. CAV 2003 was the 15th in a series of conferences dedicated to the advancement of the theory and practice of computer-assisted formal analysis methods for hardware and software systems. The conference covers the spectrum from theoretical results to applications, with emphasis on practical verification tools, including algorithms and techniques needed for their implementation. The conference has traditionally drawn contributions from researchers as well as practitioners in both academia and industry.

The program of the conference consisted of 32 regular papers, selected from 87 submissions. In addition, the CAV program featured 9 tool presentations and demonstrations selected from 15 submissions. Each submission received an average of 5 referee reviews. The large number of tool submissions and presentations testifies to the liveliness of the field and to its applied flavor.

The CAV 2003 program included a tutorial day with three invited tutorials by Ken McMillan (Cadence) on *SAT-Based Methods for Unbounded Model Checking*, Doron Peled (Warwick) on *Algorithmic Testing Methods*, and Willem Visser (NASA) on *Model Checking Programs with Java PathFinder*. The conference also included two invited talks by Amitabh Srivastava (Microsoft) and Michael Gordon (Cambridge). Five workshops were associated with CAV 2003:

- ACL2 2003: 4th International Workshop on the ACL2 Theorem Prover and Its Applications.
- BMC 2003: 1st International Workshop on Bounded Model Checking.
- PDMC 2003: 2nd International Workshop on Parallel and Distributed Model Checking.
- RV 2003: 3rd Workshop on Runtime Verification.
- SoftMC 2003: 2nd Workshop on Software Model Checking.

The publication of these workshop proceedings was managed by the respective chairs, independently of the present proceedings.

We would like to thank all the Program Committee members and the subreferees who assisted in the selection of the papers. Our thanks also go to the Steering Committee members and to last year's organizers for their helpful advice. Special thanks go to Virginia Schultz of the Office of Conference Services of the University of Colorado for assisting with the local arrangements; to Robert Krug for installing and managing the START Conference System; and to Erik Reeber for the production of the final proceedings. Finally, we gratefully acknowledge support from IBM, Intel, and Esterel Technologies.

May 2003 Warren A. Hunt, Jr. and Fabio Somenzi