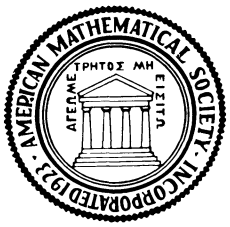

Automated Theorem Proving: After 25 Years

W. W. Bledsoe and D. W. Loveland, Editors

This volume contains papers based on a special session for automated theorem proving held at the annual meeting of the American Mathematical Society in Denver, January, 1983. At the meeting special awards were given to honor historically significant work (the *Milestone Prize*: Hao Wang, awardee) and to honor excellent current work (the *Current Research* prize: Lawrence Wos and Steven Winker, awardees). Roughly a dozen leading contributors to the field were invited to present papers; papers characterizing their research work or a broader perspective were encouraged. Papers range from a historical overview of twenty-five years of research in the automated theorem proving field to significant technical papers, including a reprint of a *Scientia Sinica* paper giving a new and elegant decision procedure for a portion of elementary geometry.

Most of the major efforts in building automated theorem provers (or theorem proving assistants) are covered by papers in this volume, a notable but less familiar example (to the ATP community) being the Suppes interactive theorem prover for teaching logic and axiomatic set theory. The well-known provers of Andrews, Bledsoe, Boyer and Moore, and Wos, et al. are represented as are term rewriting, combining decision procedures and automating mathematical discovery. The book is intended for every mathematician and computer scientist interested in the state-of-the-art in automated theorem proving, but in particular, it is intended to encourage active research mathematicians to contribute their insight to this field.

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Conference on Modern Analysis and Probability (1982, Yale University)

Richard Beals, Anatole Beck, Alexandra Bellow and Arshag Hajian, Editors

The Conference in Modern Analysis and Probability in honor of Professor Shizuo Kakutani was held on June 8–11, 1982, at Yale University on the occasion of his retirement. In these Proceedings the papers that were submitted for this Conference are presented. Initial funding was provided by the National Science Foundation.

The three major areas of mathematics on which the Conference focused were functional analysis, probability theory, and ergodic theory. Most of the articles presented were works by the respective authors on problems that were pioneered by Professor Kakutani in the past. Questions in Brownian motion, induced transformations, representation of M-spaces, and fixed point theorems were discussed.

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TABLE OF CONTENTS
April 1985

(Continued on inside back cover)