



# Automated Theorem Proving: After 25 Years

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

**A book intended for every mathematician and computer scientist interested in state-of-the-art in automated theorem proving**

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. Roughly a dozen leading contributors to the field were invited to present papers. 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 to encourage active research mathematicians to contribute their insight to this field.

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- D. W. Loveland, *Automated theorem proving: a quarter century review*  
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Contemporary Mathematics  
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AMS Short Course Lecture Notes, A Subseries of Introductory Surveys in the Proceedings of Symposia in Applied Mathematics, Volume 29, November 1983, reprinted 1984, 216 pages (softcover), PSAPM/29A03

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Proceedings of Symposia in Pure Mathematics, Vol. 42, March 1985, 536 pages (hardcover), PSPUM/42A03

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