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The Joy of TEX



A Gourmet Guide to Typesetting with the AMS-TEX macro package

M. D. SPIVAK, Ph.D.

The Joy of TEX is the user-friendly user's guide for AMS-TEX , an extension of TEX , Donald Knuth's revolutionary program for typesetting technical material. AMS-TEX was designed to simplify the input of mathematical material in particular, and to format the output according to any of various preset style specifications.

There are two primary features of the TEX system: it is a computer system for typesetting technical text, especially text containing a great deal of mathematics; and it is a system for producing beautiful text, comparable to the work of the finest printers.

Most importantly, TEX 's capabilities are not available only to TEX perts. While mathematicians and experienced technical typists will find that TEX allows them to specify mathematical formulas with greater accuracy and still have great control over

the finished product, even novice technical typists will find the manual easy to use in helping them produce beautiful technical TEX t.

This book is designed as a user's guide to the AMS-TEX macro package and details many features of this extremely useful text processing package. Parts 1 and 2, entitled "Starters" and "Main Courses," teach the reader how to typeset most normally encountered text and mathematics. "Sauces and Pickles," the third section, treats more exotic problems and includes a 60-page dictionary of special TEX niques.

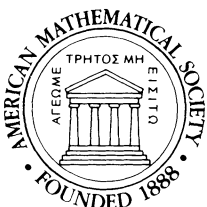
Exercises sprinkled generously through each chapter encourage the reader to sit down at a terminal and learn through experimentation. Appendixes list summaries of frequently used and more esoteric symbols as well as answers to the exercises.



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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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