

Personalia
AWARDS TO LOGICIANS

The 1991 Milestone Award for Automatic Theorem Proving (ATP) was presented to Woodrow W. BLEDSOE of the University of Texas at Austin at the annual meeting of the American Mathematical Society in San Francisco on January 18, 1991. Bledsoe has used several automated theorem provers, including STR+VE, which he developed with Larry Hines, for proving theorems in real analysis. STR+VE is an ATP program which is complete for first-order logic and which attempts proofs in an extension of first-order logic which require binding of "set variables." In accepting his award, Bledsoe noted that his own research was dependent upon the work of such earlier logic researchers as Hao Wang, who won the first Milestone Award, Martin Davis, Hilary Putnam, Larry Wos, and J. Allen Robinson, who developed the resolution method based upon Gentzen sequents. He also noted that such logicians as Leibniz, Frege, Presburger and Herbrand laid the foundations for this work.

Robert S. Boyer of the University of Texas at Austin and J. Strother Moore of Computational Logic, Inc. of Austin, Texas shared the 1991 Current award for their work in developing a computer program for verifying proofs carried out by ATP programs. In his statement accepting the award, Boyer, whose teachers included set-theoretic topologist R.L. Moore, logicians Paul Lorenzen and Norman Martin, and philosophers John Silber and Thomas Gould, quoted Gödel's remark that "The development of mathematics toward greater precision has led, as is well known, to the formalization of large tracts of it, so that one can prove any theorem using nothing but a few mechanical rules. Among the proofs checked by their program was the Church-Rosser theorem of lambda calculus and Gödel's incompleteness theorem for computer science. Their proof checker and other aspects of their work may be found in their joint books *Computational Logic* (Academic Press, 1979) and *A Computational Logic Handbook* (Academic Press, 1988).

President George Bush awarded National Medals of Science to Stephen Cole KLEENE (University of Wisconsin), John MCCARTHY (Stanford University) and Partick SUPPES (Stanford University) on 13 November 1990. Kleene was awarded the National Medal of Science Medal for his work in

recursion theory and effective computability. McCarthy received his Medal for his work in the development of the programming language LISP, the concept and development of time-sharing, application of logic to computer programs using commonsense knowledge and reasoning, and for developing and naming Artificial Intelligence. Suppes received his Medal for his work in the measurement of subjective probability and utility in uncertain situations, development and testing of general learning theory, development an Interactive Theorem Proving program and its application in Computer Aided Instruction (especially in set theory and logic, calculus, and foreign language courses), and for his work on the semantics and syntax of natural language.

In Memoriam:

ROBERT R. STOLL

Robert R. STOLL died recently. Details are not available.

Stoll received his doctorate from Yale University and taught mathematics at Oberlin College and Cleveland State University. He held a National Research Fellowship in 1945-1946 and a National Science Foundation Faculty Fellowship in 1958-1959.

Stoll's book *Set Theory and Logic*, first published by W.H. Freeman and Company in 1963 and reprinted by Dover Publications in 1979, grew out of an advanced undergraduate course which he developed at Oberlin. The purpose of the course was to introduce students to the basics of foundations of mathematics and the use of the axiomatic method in mathematics, enabling students pursue graduate courses in mathematics. This textbook, intended for a full year of study, introduced students to propositional calculus and first-order logic, and included basic ideas of Gödel's incompleteness results, naive and formal set theory (including the set-theoretic definitions of natural and real numbers), Boolean algebra, and the axiomatic treatment of algebraic theories, in particular groups, rings, and fields. An abbreviated version of *Set Theory and Logic*, intended as for self-study by high school mathematics teachers and for use as a textbook in a one-semester undergraduate logic course was published by W.H. Freeman and Company in 1961 under the title *Sets, Logic, and Axiomatic Theories*.