

Douglas T. Ross

Born December 21, 1929, Canton, China; developer of the programming language APT



Education: AB cum laude, mathematics, Oberlin College, 1951; SM without course specification, MIT, 1954.¹

Professional Experience: MIT: head of the Computer Applications Group, Electronics Systems Laboratory, lecturer, Electrical Engineering Department, project engineer, MIT Computer-Aided Design Project; SofTech Corp.: founder and president, 1969-1975, chairman, board of directors, 1975-present.

Honors and Awards: Joseph Marie jacquard Award, Numerical Control Society, 1975; Prize Paper Award, AMPS Spring Joint Computer Conference for “Theoretical Foundation for the Computer-Aided Design System,” coauthored with J.E. Rodriguez, 1963; Prize Paper Award, 20th Anniversary National Meeting, Association for Computing Machinery (ACM) for the paper “AED Approach to Generalized Computer Aided Design,” August 1967; Distinguished Service Award, Society for Manufacturing Engineers, 1980.

Ross has held many positions at MIT, including head of the Computer Applications Group at the Electronics Systems Laboratory, lecturer in the Electrical Engineering Department, and project engineer for the MIT Computer-Aided Design Project. His activities include:

- directing development of an integrated system of program development, integration, and testing **tools for production** of large-scale military programs;
- creating and directing development of the APT System for automatic programming of numerically controlled machine tools, now an international standard;
- leading the MIT Computer-Aided Design Project including research and development in language theory, language design, generalized compiler construction, computer graphics hardware and software, and design applications.

In 1969, SofTech was founded. Ross was president from 1969 to 1975 and is now chairman of the board of directors.

He was an organizer and participant in the NATO Software Engineering Conferences in Germany (1968) and Italy (1969).

BIBLIOGRAPHY

¹ He completed the course requirements for the degree of PhD in mathematics at MIT in 1956.

Biographical

Ross, Douglas T., "Origins of the APT Language for Automatically Programmed Tools," in Wexelblat, Richard L., ed., *History of Programming Languages*, Academic Press, New York, 1981.

Significant Publications

Ross, Douglas T., and J.E. Rodriguez, "Theoretical Foundation for the Computer-Aided Design System," *Proc. AFIPS Spring Joint Computer Conference*, Spartan Books, Baltimore, Md., 1963.

Ross, Douglas T., "AED Approach to Generalized Computer-Aided Design," *Proc. 20th Ann. National Meeting ACM*, ACM, New York, Aug. 1967.

UPDATES

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