

Nathaniel Rochester

Born January 14, 1919, Buffalo, N. Y; chief architect of IBM's first scientific computer and of the Prototype of its first commercial computer, and developer of symbolic assembly language programming.



Education: BS, MIT, 1941.

Professional Experience: MIT Radiation Laboratory, 1941-1943; Sylvania Electric Products, 1943-1948; IBM: 1948-1992, engineering manager, 700 series, 1954-1959, director, Experimental Machine Research, 1959.

Honors and Awards: fellow, IEEE,¹ 1958; IBM Fellow, 1967; Computer Pioneer Award, IEEE Computer Society, 1984.

Rochester worked on radar at the MIT Radiation Laboratory from 1941 to 1943 and for Sylvania Electric Products until he joined IBM in 1948. After being chief architect of IBM's first scientific computer and of the prototype of its first commercial computer (IBM-701, Defense Calculator), and in 1953 having developed symbolic assembly language programming, in 1954 he was appointed engineering manager of the 700 series, which included both. He was made director of experimental machine research in 1959 and became an IBM fellow in 1967. He is also a fellow of IEEE.

BIBLIOGRAPHY

Biographical

Rochester, N., "The 701 Project as Seen by Its Chief Architect," *Ann. Hist. Comp.*, Vol. 5, No. 2, Apr. 1983, pp. 202-204.

Significant Publications

Astrahan, M.M., and N. Rochester, "The Logical Organization of the New IBM Scientific Calculator," *Proc. ACM*, 1952, pp. 79-83.

Rochester, Nathaniel, "Symbolic Programming," *IRE Trans. Electronic Comp.*, Vol. EC-2, 1953, pp. 10-15.

UPDATES

¹ At the time of the award the organization was the IRE.

Nathaniel Rochester died June 8, 2001 (MRW, 2012)

Portrait added (MRW, 2013)