

## William Atchison

*Born: April 7, 1918, Smithfield, Ky.; computer science educator who was a major contributor to, and influence on the development of, "Curriculum 68," which in turn set the standards for computer science curricula throughout the U.S.*



*Education:* BA, mathematics and chemistry, Georgetown College, Kentucky, 1938; MA, mathematics, University of Kentucky, 1940; PhD, mathematics, University of Illinois, 1943; post-doctoral studies, mathematics, Harvard University, 1950-1951.

*Professional Experience:* laboratory assistant, Physics Laboratory, Georgetown College, 1936-1938; assistant, mathematics, University of Kentucky, 1939-1940; University of Illinois: teaching, assistant and instructor, mathematics, 1940-1944, instructor and assistant professor, mathematics, 1946-1955; Georgia Institute of Technology: research associate professor, 1955-1963, research professor, mathematics, 1963-1966, head, programming and coding group, Rich Electronic Computer Center, 1956-1957, chief, Rich Electronic Computer Center, 1957-1966, acting director, School of Information Science, 1963-1964, professor, Information Science, 1963-1966;

University of Maryland: director, Computer Science Center, 1966-1973, acting chairman, Department of Computer Science, 1973-1974, professor, computer science, 1966-1988, professor emeritus, 1988-present; senior computer scientist, National Institute of Education, 1974-1975.

*Honors and Awards:* ACM Distinguished Service Award, 1973; Chester Morrill Memorial Award, Chesapeake Division, Association for Systems Management, 1975; Special Award, IFIP WG 3.1, 1974; First ACM SIGCSE<sup>1</sup> Award for Outstanding Contributions to Computer Science education, 1981; Distinguished Alumni Award, Georgetown College, 1982; honorary member, IFIP WG 3.1, 1992.

Atchison's principal contributions to the field of computer science were in the areas of computer science education and curriculum. He was chair of the Association for Computing Machinery Curriculum Committee on Computer Science (C3S), which produced "Curriculum 68" [Atchison et al. 1968] and its predecessor, "An Undergraduate Program in Computer Science," published in 1965. Curriculum 68 served as the basis for most undergraduate programs in the US as well as for computer science programs in many overseas countries. Atchison made many presentations on Curriculum 68 both in the US and abroad. He wrote "The Development of Computer Science Education" for Vol. 24 (1985) of the series entitled *Advances in Computers*.

Atchison was very active in several professional societies including ACM, American Federation of Information-Processing Societies (AFIPS), the National Council of Teachers of Mathematics, and EDUCOM, from 1956 until his retirement in 1988. He was particularly interested in promoting computer education in secondary and primary schools, as well as in colleges. He was also interested in helping developing nations enhance their computer education efforts.

He served as a member of the AFIPS Education Committee, serving as chair for several years. He was the AFIPS representative to the International Federation for Information Processing (IFIP) Education Committee, serving as vice-chair of the Education Committee (TCh-3), and chair of the Secondary Education Working Group (WG 3.1). Through this medium he organized three international working conferences on the use of

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<sup>1</sup>Special Interest Group on Computer Science Education.

computers in secondary education. While the representative of the University of Maryland to EDUCOM, Atchison was elected to serve as chair of the Interuniversity Communication Council for the 1972-73 period.

Atchison's computer experience started on the ILLIAC at the Univ. of Illinois in 1951. He programmed the ILLIAC to do random walks in simulation of long chain rubber modules; several papers, written jointly with two physical chemists, resulted from this work.

Atchison spent two years in the US Navy (1944-1946), serving as Educational Services Officer on the island of Guam. While there, he and his staff ran 22 college courses for the GIs about to return home from service.

## **BIBLIOGRAPHY**

### **Biographical**

William Atchison is listed in the following biographical books: *American Men of Science*, *Who's Who in America*; *Who's Who in the East*; *Who's Who in Computer Education and Research*; *Personalities of the South*; *Who's Who in Computers and Data Processing*; *Who's Who in American Education*; *The Blue Book, Leaders of the English Speaking World*; *Dictionary of International Biography*; *Business Leaders of Maryland*.

### **Significant Publications**

Atchison, William F., et al., "Recommendations for Academic Programs in Computer Science," *Comm. ACM*, Vol. 12, No. 3, 1968.

Atchison, William F., "Computer Science as a New Discipline," *Proc. Inaugural Conf. on Computing, Statistics, and Scientific Research*, Cairo University, Cairo, Egypt, 1969.

Atchison, William F., "The Development of Computer Science Education," in *Advances in Computers*, Academic Press, New York, 1985, pp. 319-377.

## **UPDATES**

Bill Atchison died May 19, 1998. (MRW, 2012)