

Roger M. Needham

Born February 9, 1935, Birmingham, UK, successor to Maurice Wilkes as the director of the Cambridge University Computer Laboratory, who maintained the level and quality of research and innovation.



Education: BA, Cambridge University, 1956; PhD, Cambridge University, 1961.

Professional Experience: Cambridge Computer Laboratory, 1963-present; head of department, 1980-present.

Honors and Awards: fellow, Royal Society, 1985; fellow, ACM, 1994.

Roger M. Needham has worked in the Cambridge Computer Laboratory, and been on the faculty, since 1963, becoming head of the department in 1980. He worked on the design automation programs for the Titan computer, and subsequently on its operating system, being in charge of the multiple-access project at the time of its completion. As part of the Titan system development, Needham developed the first use of a one-way function to protect the user's password file, a tactic that has since become almost universally used in secure systems. Later he led the project to design and build the CAP computer and its operating system, and after that the Cambridge Distributed Computing System. In the 1980s he was concerned with major projects in distributed computing and communications. He was elected to the Royal Society in 1985.

UPDATES

Roger Needham died March 1, 2003. (MRW, 2012)