

OBITUARY

Professor Roger Needham (1935–2003)



Professor Roger Needham was one of a pioneering computer scientist from Cambridge. He remained associated with Cambridge since his undergraduate days in 1950's. After graduation in mathematics and philosophy, he became interested in computing in 1956 when he encountered the Cambridge Language Research Unit working on automation of language translation. He went on to do his Ph.D. in automatic classification and its application to automated retrieval.

The computer science itself was in infancy when he got involved with it. In the 50 years that he spent in Cambridge, he started and supported many projects in operating systems, time sharing systems, memory protection, local area networks and distributed systems. His fingerprints can be found many of the important areas of the computer science. Whenever you type in a password, the chances are that it will be encrypted using an algorithm that he published in 1966.

From 1980 to 1995, he headed the Computer Laboratory at Cambridge. He also spent some time as visiting consultant to firms like Rand Corporation, Xerox-PARC and DEC System Research Centre. Alongwith research, he also remained associated with public service as a Village Parish Councillor and later as South Cambridgeshire District Councillor.

In 1997, Professor Needham agreed at the age of 62 to start Microsoft Research Laboratory in Cambridge at the behest of Bill Gates and exceeded the expectations. As a mark of respect Microsoft named the European Research Headquarters, the Roger Needham building.

Professor Needham spoke what he thought, even when he knew it might prove unpalatable to his audience or to his friends. He took immense pleasure in teaching Data Structure and Algorithms, taking it as challenge to make it interesting for students. A genuinely modest man, he was tremendously popular with staff for his ability to get the best out of people without compromising high standards of courtesy. With typical frankness, he announced the news to staff about his terminal cancer and 12–18 months of prognosis.

Roger Needham remained devoted to the engineering notion that systems should be designed to useful things for real people. He had an amazing confidence that great minds have, which enables them to admit that problems are very difficult or even insoluble, rather than having to pretend that everything is under intellectual control. He died peacefully at his home on the evening of Friday 28 February, 2003.