

# Noah Prywes, Computer and Information Science

NOVEMBER 10, 2020 | VOL 67 ISSUE 18 ([HTTPS://ALMANAC.UPENN.EDU/VOLUME-67-NUMBER-18](https://almanac.upenn.edu/volume-67-number-18)) | DEATHS |

PRINT



Noah Prywes

Noah S. Prywes, professor emeritus of computer and information science in Penn's School of Engineering and Applied Science, died on September 21. He was 94.

Dr. Prywes was born in Warsaw, Poland in 1925. He immigrated with his family to pre-state Israel in 1933; there, he later served in the Haganah and the beginnings of the Israeli Navy. He earned a BS in electrical engineering from the Technion-Israel Institute of Technology, then moved to the U.S. for graduate school. He earned a master's degree at Carnegie Institute of Technology (now Carnegie Mellon University) and, in 1954, a PhD in applied physics at Harvard University. Dr.

Prywes first worked on early electronic computers at UNIVAC in the 1950s, leading the computing unit for the UNIVAC LARC computer, one of the world's first supercomputers.

In 1958 Dr. Prywes was hired as an associate professor at the Moore School of Electrical Engineering at the University of Pennsylvania. Ten years later, he became a full professor in the Moore School's relatively new department of computer science. He remained a professor of computer science at Penn for almost three decades, during which the department moved to Penn's School of Engineering and Applied Science (SEAS).

While at Penn, Dr. Prywes advanced the school's international academic presence: Dr. Prywes took a leave in 1975 to research budget allocation with researchers at Tel Aviv University and the Ministry of France in Israel. In 1984, he was part of a delegation Penn sent to the People's Republic of China to strengthen academic linkages (*Almanac* September 18, 1984 (<https://almanac.upenn.edu/archive/v31pdf/n04/091884.pdf>)). In 1996, he retired and took emeritus status (*Almanac* May 7, 1996 (<https://almanac.upenn.edu/archive/v42pdf/050796.pdf>)).

Dr. Prywes was a pioneer in early computer technology; under his stewardship, Penn's Moore School developed one of the nation's first computer science departments. One of his students, Sister Mary Kenneth Keller, was the first person to receive a PhD in computer science in June 1965. In the 1960s, Dr. Prywes created Multi-List, one of the first relational database management systems. Around the same time, he advanced and commercialized timesharing, the predecessor to today's cloud computing (*Almanac* November 1969 (<https://almanac.upenn.edu/archive/v16pdf/n03/111969.pdf>)).

In the 1980s and 1990s, Dr. Prywes was at the forefront of automatic programming, nonprocedural specification systems and reverse engineering and the application of these technologies to parallel and distributed computing. In the early 2000s, he developed innovative speech technology for use in telephony. These technologies have gone on to have many applications, ranging from Wall Street financial reporting to real-time systems for the military and aerospace. Dr. Prywes was awarded numerous patents and was a Fellow of the IEEE Computer Society.

Dr. Prywes is survived by his wife of 67 years, Ruth; his sons, Menahem, Daniel and Ron; and seven grandchildren.