

Paul Baran, IEEE ComSoc Fellow, Pioneer of Internet, Dies at 84



[Paul Baran](#), an IEEE Communications Society Fellow, long time member of ComSoc, one of the founding fathers of the Internet, has passed at the age of 84.

Mr. Baran was born in Poland on April 29, 1926 in Grodno, and moved with his parents to the US in 1928. He grew up in Philadelphia and later graduated from Drexel Institute of Technology in 1949 with a B.S. degree in electrical engineering, and an M.S. in Engineering from the University of California, LA in 1959.

One of his first jobs was working on the first commercial computer, the UNIVAC. Mr. Baran joined the RAND Corporation in 1959, where he remained until 1968. Mr. Baran's work in the 1960s at the RAND Corporation formed the foundation for what became the Internet. At the time, Paul Baran, as a young engineer at the Rand Corporation, began thinking about how to build a communications network which could survive a nuclear first strike. In 1960, Baran described a technique he called "distributed communication" in which each communication node would be connected to several other communication nodes. Switching was thus distributed throughout the network, giving it a high degree of survivability. To move data through this network, Baran adopted message switching, which digitized the information to be sent, broke it into chunks of 1024 bits, and provided a header containing routing information. A message would then be reconstructed at the receiving node. Baran described his proposed system in great detail in the summer of 1964 in an eleven-volume Rand publication entitled "On Distributed Communications." Baran and another engineer conceived of "packet switching" as the best means to transfer data in a computer network. A few years later, their ideas were incorporated into the ARPANET.

After leaving RAND, Mr. Baran co-founded the Institute for the Future, a nonprofit research group specializing in long-range forecasting. He was also an entrepreneur. He started seven companies, five of which eventually went public.

In 2000, Mr. Baran jointly received the IEEE Internet Award "for their early, preeminent contributions in conceiving, analyzing and demonstrating packet-switching networks, the foundation technology of the Internet."

As an IEEE member from student to Life Fellow, Mr. Baran served as session chairman for a number of [IEEE Communications Society](#) events along the way. His first publication outside of RAND about packet switching was a 1964 paper published in the Transactions of the Communications Society.

Among many career awards, in 1987, Mr. Baran received [IEEE Communications Society's Edwin Howard Armstrong Achievement Award](#). In 1990, he received [IEEE Alexander Graham Bell Medal](#) "For pioneering in Packet Switching." Mr. Baran reportedly died Saturday 26 March 2011 at his home in Palo Alto, California, from complications caused by lung cancer. He was married to Evelyn Baran who died in 2007. He is survived by his son David, three grandchildren; and his companion of recent years, Ruth Rothman. Paul will be deeply missed.

http://www.ieeeahn.org/wiki/index.php/Paul_Baran

<http://www.nytimes.com/2011/03/28/technology/28baran.html>

[A Brief History of Communications](#)

<http://www.comsoc.org/about/memberprograms/fellows/1993>

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