



## Lynn Conway

*Professor of Electrical Engineering and Computer Science, Emerita  
University of Michigan, Ann Arbor.*

After studying physics at MIT and earning her BS (62) and MSEE (63) at Columbia University's School of Engineering and Applied Science, Lynn joined IBM Research in Yorktown Heights, NY. While working on IBM's Advanced Computing Systems project she made [foundational contributions](#) to computer architecture. Sadly, IBM fired Lynn as she underwent gender transition in 1968.

A gritty survivor, Lynn started her career all over again as a contract programmer in a covert new identity in 1969. Advancing rapidly, she soon became a computer architect at Memorex Corporation, but also began decades of living in fear of being 'outed' and losing her career again.

Recruited by Xerox Palo Alto Research Center (PARC) in 1973, Lynn invented scalable design rules for VLSI chip design, [became principal author](#) of the seminal Mead-Conway text *Introduction to VLSI Systems*, and in 1978, while serving as a [Visiting Associate Professor of EECS at M.I.T.](#), pioneered [the immersive-teaching of these new methods](#).

Lynn's methods and teachings [quickly spread](#) to over 100 universities, [launching a revolution](#) in VLSI microchip design during the 1980's. Back at PARC Lynn also invented and in 1979 [massively demonstrated an internet-based e-commerce infrastructure for rapid chip prototyping](#), thereby spawning [the MOSIS System](#) and the "fabless-design + silicon-foundry" industrial paradigm of modern semiconductor-chip design and manufacturing.

As Assistant Director for Strategic Computing at DARPA, Lynn next crafted the meta-architecture and led the planning of the [Strategic Computing Initiative](#), the Department of Defense's major 1980's effort to coalesce the technology-base for future intelligent weapons systems. In 1985 she joined the University of Michigan as Professor of EECS and Associate Dean of Engineering, quietly continuing [her distinguished career](#). Now Professor Emerita, she lives with her husband Charles Rogers on their [24-acre homestead](#) in rural Michigan. They've been together 35 years.

As Lynn neared retirement in 1998, she faced 'outing' as reports about [her early work at IBM](#) began surfacing. With a growing sense of pride in her accomplishments, she overcame her fears, quietly came out via the internet, and gradually created a major [transgender advocacy website](#). Translated by volunteers into [many languages](#), her site quickly became [a beacon of hope and encouragement](#) for gender transitioners world-wide, and [a trans focal-point to help expose those responsible](#) for the *Gender Madness in American Psychiatry*.

Since Lynn "didn't look like an engineer" back in the day, Silicon Valley's cognoscenti [were clueless about her accomplishments](#) in the 1970's. That began to change in 2012, when Lynn published her "VLSI Reminiscences" in a special issue of *IEEE Solid-State Circuits Magazine*, revealing how - [closeted and hidden behind the scenes](#) - [she conceived the ideas and orchestrated the events](#) that swept through and reshaped an entire global industry.

Lynn is a [Life Fellow](#) of the IEEE, [Fellow](#) of the AAAS, Member of the [Hall of Fellows](#) of the [Computer History Museum](#), Member of the [National Academy of Engineering](#) and has been [selected for induction](#) into the [National Inventors Hall of Fame](#) in 2023. Lynn also holds honorary degrees from [Trinity College](#), [Illinois Institute of Technology](#), [University of Victoria](#), and [University of Michigan](#). When awarded the [James Clerk Maxwell Medal](#) by the IEEE and the [Royal Society of Edinburgh](#), her [citation included](#) these words:

*"Lynn Conway's work has provided the underpinnings for innovations, discoveries and achievements in every area of scientific and humanitarian study."*

In 2020, IBM CEO Arvind Krishna [apologized on behalf of the company](#) for IBM's treatment of Lynn back in 1968. Lynn was also awarded the rare and prestigious [IBM Lifetime Achievement Award](#), signifying that she "changed the world through technological inventions."

