



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. 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 [teaching of these new methods](#).

Lynn's 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 modern 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 engineer husband Charles Rogers on their [24-acre homestead](#) in rural Michigan. They've been together over 29 years.

As Lynn neared retirement, 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 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 industry.

A [Life Fellow](#) of the [IEEE](#), [Fellow](#) of the [AAAS](#), Member of the [Hall of Fellows](#) of the [Computer History Museum](#) and elected to the [National Academy of Engineering](#), Lynn has also received honorary degrees from [Trinity College](#), [Illinois Institute of Technology](#) and the [University of Victoria](#). Awarded the 2015 [James Clerk Maxwell Medal](#) by the [IEEE](#) and the [Royal Society of Edinburgh](#), her [citation included](#) these words:

"Her influence on modern electrical engineering is deep and profound, arguably on the scale of [Armstrong](#) and [Steinmetz](#)."

