[](http://ai.eecs.umich.edu/people/conway/LynnPhotos/Lynn%20at%20UM%202013Em.jpg)[**Lynn Conway**](http://www.lynnconway.com)

*Professor of Electrical Engineering and Computer Science,* [*Emerita*](http://ai.eecs.umich.edu/people/conway/Awards/Emerita.jpg)

*University of Michigan, Ann Arbor.*

After studying physics at [MIT](http://web.mit.edu/) and earning her BS (62) and MSEE (63) at [Columbia University](http://www.columbia.edu/)’s [School of Engineering and Applied Science](http://engineering.columbia.edu/), Lynn joined [IBM Research in Yorktown Heights, NY.](https://www.research.ibm.com/labs/watson/) While working on [IBM's Advanced Computing Systems project](http://ai.eecs.umich.edu/people/conway/Memoirs/ACS/Lynn_Conway_ACS_Reminiscences.pdf) she made [foundational contributions](http://www.computer.org/web/awards/pioneer-lynn-conway) to computer architecture. Sadly, [IBM fired Lynn](http://ai.eecs.umich.edu/people/conway/ACS/IBM/IBM-Interactions.html) as she underwent gender transition in 1968.

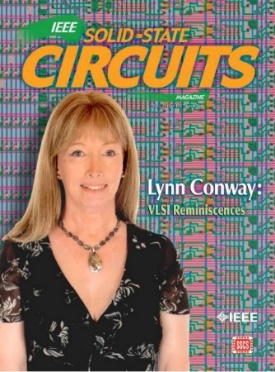
A gritty survivor, Lynn started her career all over again as a contract programmer in a covert new identity. Advancing rapidly, she soon became a computer architect at Memorex Corporation, but also began decades of living in fear of being 'outed' and losing her career again.

Recruited by [Xerox Palo Alto Research Center](http://www.amazon.com/Dealers-Lightning-Xerox-PARC-Computer/dp/0887308910/) (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*](http://www.edn.com/electronics-blogs/other/4307325/The-book-that-changed-everything), and in 1978, while serving as a [Visiting Associate Professor of EECS at M.I.T.](http://www.eecs.mit.edu/docs/newsletter/VLSI.pdf), pioneered [the teaching of these new methods](http://ai.eecs.umich.edu/people/conway/Memoirs/MIT/MIT_Reminiscences.pdf).

Lynn’s teachings [quickly spread](http://ai.eecs.umich.edu/people/conway/VLSI/MPCAdv/Instructors.html) to over 100 universities, [launching a revolution](http://ai.eecs.umich.edu/people/conway/Impact/FundingaRevolution.html) 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](http://ai.eecs.umich.edu/people/conway/VLSI/MPCAdv/MPCAdv.pdf), thereby spawning [the MOSIS System](http://www.computer.org/web/awards/pioneer-lynn-conway) and the "fabless-design + silicon-foundry" industrial paradigm of modern semiconductor-chip design and manufacturing.

As Assistant Director for Strategic Computing at [DARPA](http://www.darpa.mil/), Lynn next crafted the meta-architecture and led the planning of the [Strategic Computing Initiative](http://ai.eecs.umich.edu/people/conway/CSE/SCI/HighTechnology4-85.pdf), 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](http://ai.eecs.umich.edu/people/conway/Awards/Emerita.jpg). Now Professor Emerita, she lives with her engineer husband Charles Rogers on their [23 acre homestead](http://ai.eecs.umich.edu/people/conway/Land/Land.html) in rural Michigan. They’ve been together over 28 years.

As Lynn neared retirement, she faced ‘outing’ as reports about [her early work at IBM](http://people.cs.clemson.edu/~mark/acs.html) 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](http://www.lynnconway.com). Translated by volunteers into [many languages](http://ai.eecs.umich.edu/people/conway/conway-Translation%20status.htm), her site quickly became [a beacon of hope and encouragement](http://ai.eecs.umich.edu/people/conway/TSsuccesses/TSsuccesses.html) for gender transitioners world-wide and [a trans focal-point to help expose](http://ai.eecs.umich.edu/people/conway/TS/News/News.html#Zucker) the [*Gender Madness in American Psychiatr*y](http://www.amazon.com/Gender-Madness-American-Psychiatry-Struggle/dp/1439223882/).

[](http://ai.eecs.umich.edu/people/conway/Memoirs/Files/SSCM_Cover_Page.JPG)Since Lynn “[didn’t look like an engineer](https://twitter.com/lynnconway/status/628930663593414656)” back in the day, Silicon Valley’s cognoscenti [were clueless about her accomplishments](http://www.nsf.gov/od/odi/presentations/2015_NSF_Pride_Talk_by_Lynn_Conway.ppsx) in the 1970’s. That began to change in 2012, when Lynn published her ["VLSI Reminiscences"](http://ai.eecs.umich.edu/people/conway/Memoirs/VLSI/SSCM/VLSI_Reminiscences.pdf) in a special issue of *IEEE* *Solid-State Circuits Magazine*, revealing how - [closeted and hidden behind the scenes](http://ai.eecs.umich.edu/people/conway/Memoirs/VLSI/Commentaries/Covering_by_Ken_Shepard.pdf) - she conceived the ideas and orchestrated the events that swept through and reshaped an entire industry.

A [Fellow](http://www.ieee.org/membership_services/membership/fellows/index.html) of the [IEEE](https://www.ieee.org/index.html), Member of the [Hall of Fellows](https://www.youtube.com/watch?v=d0mBjP-gBik) of the [Computer History Museum](http://www.computerhistory.org/) and elected to the [National Academy of Engineering](https://www.nae.edu/), Lynn has also received honorary degrees from [Trinity College](https://issuu.com/tcdigitalrepository/docs/1998winter/24) and [Illinois Institute of Technology](https://iit.edu/news/iittoday/?p=31501). Awarded the 2015 [James Clerk Maxwell Medal](http://ai.eecs.umich.edu/people/conway/Memoirs/Talks/RSE/Life_In_Stealth_of_Microchip_Genius_The_Times.pdf) by the [IEEE](https://ieeetv.ieee.org/history/2015-ieee-honors-ieee-rse-james-clerk-maxwell-medal-lynn-conway) and the [Royal Society of Edinburgh](https://www.youtube.com/watch?v=bw2mPAp4XGk), her [citation included](http://ai.eecs.umich.edu/people/conway/Memoirs/Talks/RSE/Maxwell_Medal_Citation_by_Barry_Shoop.pdf) these words:

*“Her influence on modern electrical engineering is deep and profound,*

*arguably on the scale of* [*Armstrong*](https://en.wikipedia.org/wiki/Edwin_Howard_Armstrong) *and* [*Steinmetz*](https://en.wikipedia.org/wiki/Charles_Proteus_Steinmetz)*.”*