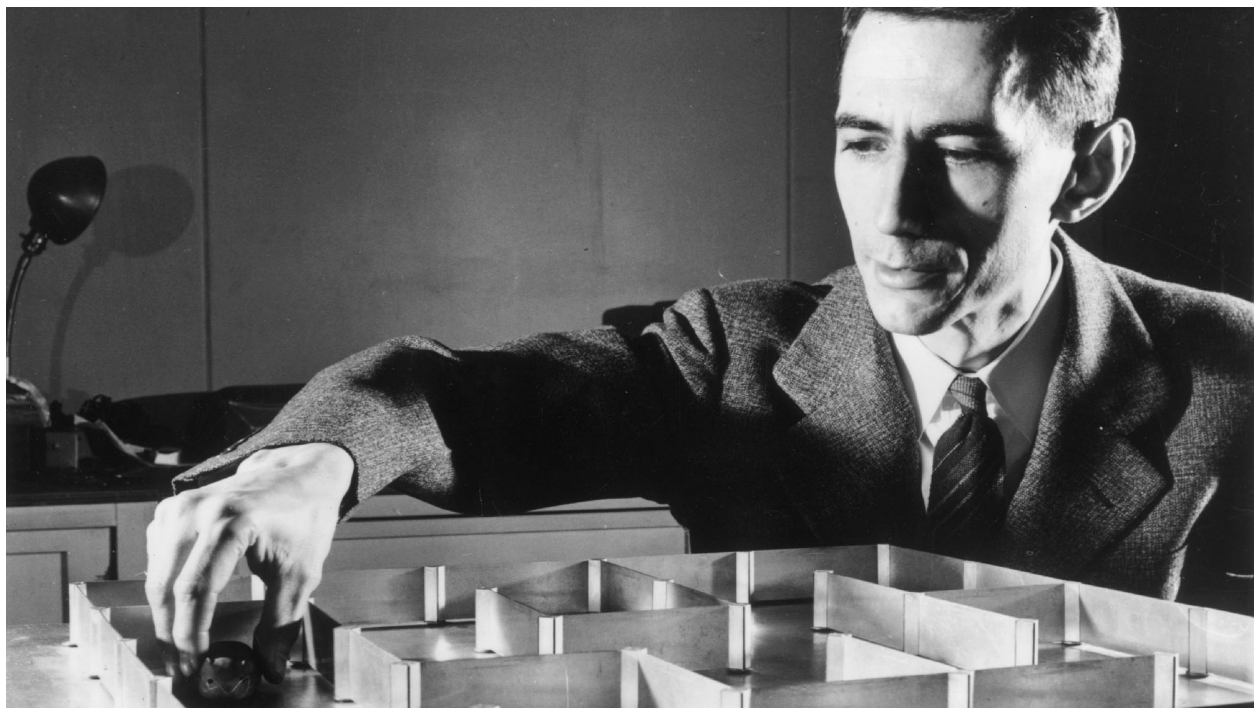


Creativity and Fun in Science and Technology

What sort of things did Claude Shannon think about when he developed digital logic (and the idea of a binary digit or “bit”) and his theory of communication? Was he just interested in serious science and understanding? Well maybe, but he also liked to ride unicycles, juggle and once built a portable device to help him win at roulette tables. These are some of the insights from the full-length movie about Claude Shannon, sponsored by the IEEE Foundation, called [The Bit Player](#). The movie was partly based upon an IEEE oral history done with the famous scientist in the mid-1980’s and also included family videos showing Shannon’s amusements as well as his accomplishments.



Claude Shannon invented the basic concepts that helped create the digital age and enable modern communication systems, such as today’s advanced wireless networks. But he had a playful mind, and that playfulness was an important element in who he was and the things he discovered.

Like Claude Shannon, a good engineer and scientist gets joy and inspiration from the things that amuse him or her. Serious work requires serious fun. IEEE-USA is working to meet the needs of engineers by providing important resources for fun-seeking engineers and technologists to help you develop your own technical genius and change the world.

This comic book is great for all engineers, especially young future engineers, to learn about the effects engineering has on the world! Readers follow the journey of the Slate twins as they learn about their dangerous family secrets—and fight to keep them safe from evildoers!

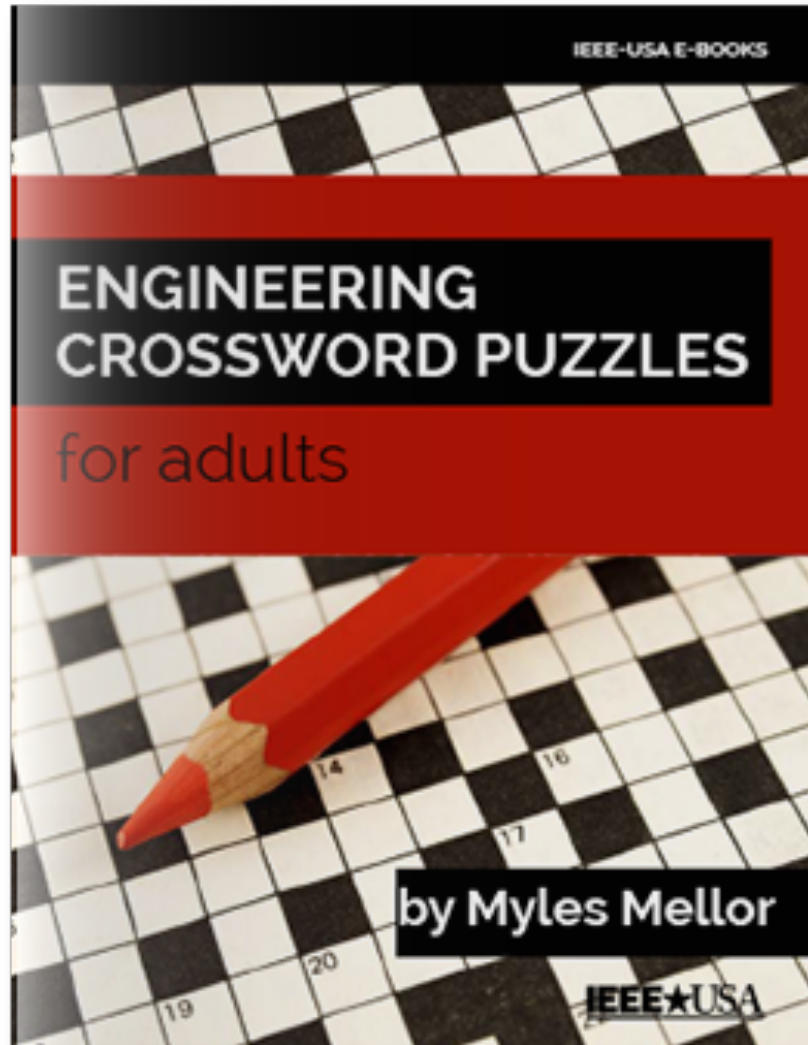


Second, IEEE USA created the first IEEE adult coloring book and crossword puzzle, also created by Jeff Knurek.



Coloring books are no longer just for kids. In fact, adult coloring books have become a full-on trend, with tens of millions sold in recent years as people discover that the process of choosing and then adding colors to an image helps to lower stress levels, create focus and offer an outlet for personal expression. Now, IEEE-USA has published an engineering coloring e-book for adults, created especially for IEEE members. IEEE-USA E-BOOKS' *Engineering Coloring Book for Adults* is a stimulating, yet mentally relaxing, collection of 25 full-page designs. Patterns and illustrations of engineering icons inspired the designs, which any technical professional will quickly recognize. Award-winning game designer Jeff Knurek, who illustrates the widely syndicated Jumble puzzle, created the designs. Currently, more than 70 million people a day, in more than 600 newspapers, in the United States and internationally, see the Jumble puzzle.

Third, IEEE-USA has published an engineering crossword puzzle book for adults, written by Myles Mellor.



IEEE-USA E-BOOKS created a crossword puzzle e-book just for you on the engineering profession. You can download and print this e-book in its entirety, and do the puzzles all at once – or just download and print the puzzle you wish to do on a particular day. Try your hand (and your brain) on such puzzles as NANOCHIP, STORMRAM, and SOLENOID; or PLASMONICS, SPINTRONIX, and NEBULAE.

Find out more about these important fun resources for serious engineers and other kids at the IEEE-USA book store, <https://ieeusa.org/shop/>.

Having hobbies is an important way to blow off steam when you aren't busy inventing the future or saving civilization. One of my hobbies is making beer. When I was President-Elect for IEEE-USA in 2018 I did an IEEE-USA webinar on making beer. For

many engineers, beer goes well with having fun and there are lots of stories about how beer inspired various scientific insights. View the webinar on The Art and Pleasure of Brewing, here: <https://ieeeusa.org/events/webinar-3-16-18/> Maybe you have a hobby you would like to share with your fellow technologists?

Engineering and science require serious effort but many of the best engineers and scientists have had a fun streak that lets them relax and enjoy life. Taking such breaks often leads to new insights as your brain works on what you have been working on, in the background. Be sure to develop your fun side as well as your insights. The two are connected to each other!

Tom Coughlin
Past-President, IEEE-USA



Me and Chiphead at the 2020 Designcon in Santa Clara, CA