Radia Perlman - a.k.a. the 'Mother of the Internet', invented STP networking (USA)

Radia Perlman grew up in her New Jersey home surrounded by technology. Her father worked on inventing RADAR, and her mother was a mathematician and computer programmer - something very rare in a time when it was still wrongly thought that women were not as good at science as men.

Radia has said that she found school "effortless and fascinating", and enjoyed all her subjects, including music and literature. Even though she was the best science and math student in her school, Radia only started to consider working with computers when she took a programming class in high school. She was the only woman in the class and later said about it "I was not a hands-on type person. It never occurred to me to take anything apart. I assumed I'd either get electrocuted, or I'd break something". After leaving high-school, Radia studied physics at the prestigious Massachusetts Institute of Technology (MIT)

She was given her first paid job in 1971 as part-time programmer for the LOGO Lab at the MIT Artificial Intelligence Laboratory, programming system software like debuggers. Working under the supervision of the famous Seymour Papert, she developed a child-friendly version of the educational robotics language LOGO, called TORTIS ("Toddler's Own Recursive Turtle Interpreter System").

During research performed in 1974–76, young children—the youngest aged 3½ years, programmed a LOGO educational robot called a Turtle. Because of this invention, Perlman has been described as a pioneer of teaching young children computer programming.

Radia achieved both Bachelor's and Master's degrees in Mathematics and a Ph.D. in Computer Science from MIT in 1988. She also invented the spanning tree algorithm and the Spanning Tree Protocol (STP), for which she is most famous. While working as a consulting engineer at the Digital Equipment Corporation in 1984, she was asked to develop a more efficient way for network bridges to communicate with one another.

Radia has also done some other really cool things:
- Perlman is the author of a textbook on networking and coauthor of another on network security.
- She holds more than 100 issued patents.
- She was a Fellow at Sun Microsystems and has taught courses at
  - The University of Washington
  - Harvard University

- ○ MIT
- Radia has been the keynote speaker at events all over the world.

She is also the recipient of several awards:
- National Inventors Hall of Fame induction (2016)
- Internet Hall of Fame induction (2014)
- SIGCOMM Award (2010)
- USENIX Lifetime Achievement Award (2006)
- Recipient of the first Anita Borg Institute Women of Vision Award for Innovation in 2005
- Silicon Valley Intellectual Property Law Association Inventor of the year (2003)
- Honorary Doctorate, Royal Institute of Technology (June 28, 2000)
- Twice named as one of the 20 most influential people in the industry by Data Communications magazine:
  - ○ in the 20th anniversary issue (January 15, 1992)
  - ○ and the 25th anniversary issue (January 15, 1997).
- Fellow of the Association for Computing Machinery, class of 2016