



Ray Kurzweil

Science Talent Search Finalist 1965
National Medal of Technology 1999
National Inventors Hall of Fame 2002
Science Talent Search Finalist 1965

At about the age that Thomas Edison created his first authentic invention, a repeating device for transmitting telegraph signals, Raymond Kurzweil was completing his – a computer program that composed classical music. Edison's invention won him the gratitude of fellow telegraph operators; Kurzweil's made him a finalist in the 1965 Science Talent Search. It also marked his first efforts in understanding pattern recognition, a field that would dominate his future career.

As a prolific inventor and entrepreneur, comparisons to Edison are apt. Kurzweil pioneered numerous technological advances and founded nine companies. Among his "firsts" are:

- the first print-to-speech reading machine for the blind,
- the first CCD flat-bed scanner,
- the first text-to-speech synthesizer,
- the first music synthesizer to recreate the sounds of orchestral instruments.

The companies he's founded span fields as diverse as music synthesis, speech recognition, reading technology, virtual reality, financial investment, medical simulation and cybernetic art. Notably, all of them created new technologies and new markets, and continue as market leaders today.

The Kurzweil Reading Machine, for which he was inducted into the National Inventors Hall of Fame, scans and reads printed material and is considered the most significant advancement for the blind since Braille. Stevie Wonder bought the first production unit, which led to their friendship and exploration of computer-based music.

Kurzweil graduated from MIT in 1970 with degrees in computer science and literature. While there he developed a small business matching high school students to potential colleges, and ultimately sold it for \$100,000 plus royalties. Several innovations and corporations later he received the nation's highest honor in technology, the National Medal of Technology in 1999, followed by the \$500,000 Lemelson-MIT Prize in 2001 and induction into the National Inventors Hall of Fame in 2002.

Kurzweil's first book, "The Age of Intelligent Machines", received the award for Most Outstanding Computer Science Book of 1990; his latest bestseller is "The Age of Spiritual Machines: When Computers Exceed Human Intelligence" and has been published in nine languages.

"I've had the idea of being an inventor since I was five years old, and I quickly realized that you have to have an understanding of the future if you're going to succeed as an inventor. It's a little bit like surfing; you have to catch a wave at the right time. ... Most inventors fail not because they can't get something to work, but because the market's enabling forces are not in place at the right time. ... So I became a student of technology trends, and have developed mathematical models about how technology evolves in different areas. ... One thing I'd say is that if anything, the future will be more remarkable than any of us can imagine."