Science & Technology

Disney 'Imagineer' Lanny Smoot's Lightsaber Moment

The engineer joins the National Inventors Hall of Fame.

By Grant Currin | Spring/Summer 2024



Disney

With over a hundred patents and counting, Lanny Smoot '77SEAS, '78SEAS is among the Walt Disney Company's most prolific inventors. His most recognizable innovations include a real-life extendable *Star Wars* lightsaber, the technology that makes the ghost of Madame Leota roam the Magic Kingdom's Haunted Mansion, and the *Moana*-inspired interactive "water harps" seen at EPCOT's Journey of Water attraction.

In May, the engineer added another achievement to his résumé: induction into the National Inventors Hall of Fame. Smoot is only the second Disney employee to earn this honor; Walt himself was the first.

Smoot first learned the art of tinkering from his father, whom he calls an "itinerant inventor." As a promising science student at Brooklyn Technical High School, Smoot received a scholarship to Columbia from Bell Labs, as well as a summer job with the company. He earned a master's in electrical engineering in 1978, just a year after finishing his undergraduate degree.

"I learned my engineering at Columbia University, and that stood with me all my life," says Smoot, who, while working at Bell Labs for over two decades, invented critical technologies for fiber-optic transmission and early videoconferencing.

Today, after twenty-five years as a Disney "imagineer," Smoot isn't slowing down. In fact, he's more excited than ever about his latest project, the HoloTile floor. "It's the world's first omni-directional treadmill floor," he explains. When used with a virtualreality headset, Smoot's invention could allow someone to move through an imaginary world without having to worry about the physical space around them.

"We finally have the thing that was always missing from virtual reality," he says. "I think it's going to change the world."



Guide to school abbreviations

All categories > Read more from Grant Currin