

SHORT BIO

Rita Singh is a Research Professor at the Carnegie Mellon University's School of Computer Science/Language Technologies Institute, with affiliations to three other departments. At CMU, she leads the Center for Voice Intelligence and Security, and co-leads the Machine Learning for Signal Processing and Robust Speech Processing research groups. She has worked on speech and audio processing for over two decades. Since 2014, her work has been focused on developing the science of profiling humans from their voice, a niche area at the intersection of Artificial Intelligence and Voice Forensics. The technology pioneered by her group has led to three world firsts: In 2018, her team created the world's first voice-based profiling system, demonstrated live at the World Economic Forum. In 2019 her group also created the world's first instance of human voice – that of the artist Rembrandt – generated based on evidence from facial images. In 2020, her team conceptualized and enabled the first voice-based detection system for Covid-19. She is the author of the book "Profiling Humans from their Voice," published by Springer-Nature in 2019. She has assisted multiple international agencies in analyzing voice evidence for identifying and profiling potential suspects in crimes under investigation. Her contributions have been recognized in global media, with several hundred mentions in various national and regional newspapers, magazines, online articles, TV and radio programs, podcasts and private talks, including a few church sermons.

