



Henrique (Rico) Malvar is a Microsoft Distinguished Engineer and the Chief Scientist for Microsoft Research. He was born and raised in Brazil. Before moving to industry in 1993, he was a professor of electrical engineering at University of Brasilia, Brazil. Rico was Vice-President of Research and Advanced Technologies at PictureTel from 1993 to 1997. He joined Microsoft in 1997, when he started a signal processing research group, which developed new technologies such as new media compression formats used in Windows, Xbox, and Office, microphone array processing technologies used in Windows, Tablet PCs, and Xbox Kinect, as well as machine learning technologies for music identification in Windows Media, junk mail filtering in Exchange, and others.

The group also developed the first prototype of the RoundTable videoconferencing device. Rico was a key architect for several media compression formats, such as WMA and HD Photo/JPEG XR, and made key contributions to the popular video format H.264, used by YouTube, Netflix, digital TV, and many other applications. Rico received a Ph.D. in electrical engineering and computer science from the Massachusetts Institute of Technology in 1986. His technical interests include multimedia signal compression and enhancement, fast algorithms, multi-rate filter banks, and multi-resolution and wavelet transforms. He has over 160 publications and over 115 issued patents in those areas. He received the Young Scientist Award from the Marconi International Fellowship in 1981, was elected to Fellow of the IEEE in 1997, received the Technical Achievement Award from the IEEE Signal Processing Society in 2002, and was elected a Member of the U.S. National Academy of Engineering (NAE) in 2012. He is also a Member of the Brazilian Academy of Sciences and the Brazilian National Academy of Engineering.