

Dr. Leo Kärkkäinen

**Distinguished Scientist, Technology Exploration and Foresight, Nokia Research Center
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Dr. Leo Kärkkäinen is Distinguished Scientist, in Nokia Research Center Tampere, which has its strategic aim in intelligent interactions and context aware multimodal experiences for fused physical and digital worlds, with intent on driving breakthroughs that will reach far into the future, enabling new business opportunities for Nokia.

As a technology expert, Leo is responsible for development of the research content and practices that pursue disruptive innovation in addition to individual research activities. He is a member of CEO technology council of Nokia. The CEO technology council is a selection of 20 top Nokia experts from various technology areas reporting directly to CEO of Nokia.

Leo joined Nokia in 1996 as Senior Research Engineer in acoustics. Later, as a Principal Scientist, he led the Electroacoustic group in the Speech and Audio Systems Laboratory and Multimedia Laboratory of Nokia Research Center. He has extensive experience in physical modeling of acoustic phenomena. During the years 2006-2008 he was, Research Fellow, Chief Visionary of NRC Systems Research.

Before joining Nokia he studied quantum field theories at high temperatures, especially the formation of quark gluon plasma. After having his PhD in Theoretical Physics from the University of Helsinki 1990, Leo served in postdoctoral positions as a Research Scientist in University of Bielefeld Germany, University of Arizona Tucson US, and the Niels Bohr Institute Copenhagen Denmark.

Leo is also an Adjunct Professor of Theoretical Physics in University of Helsinki since 1995, and continues lecturing on physical acoustics at the university. His interests lie in various fields of physics, from nanotechnologies to modeling of complex systems. He is also interested in teaching and creating organizational structures for innovation. His current focus is in cognitive user interfaces and new user interface paradigms.

Leo is the author and co-author of more than 60 academic papers in particle physics, and acoustics. He has five patents.