



UNIVERSITÀ
DEGLI STUDI DI TRIESTE



Monday 17th June 2019 at 11:00 a.m.

Room A ground floor, Building C2, Via Valerio 10

Signal Enhancement in Consumer Products

Dr. Akihiko (Ken) Sugiyama

Yahoo! JAPAN Research

Abstract: The lecture presents the A to Z of signal enhancement when it is applied to consumer products such as cellphone handsets, digital still cameras and camcorders, PCs and tablet computers, TV receivers, and gaming controllers. Starting from basic single channel signal enhancement in the frequency domain, it continues on to two-channel processing and multi-channel processing also known as microphone arrays. Types of noise to be covered include environmental noise, mechanical noise, impact (or transient) noise and wind noise. Problems and solutions that include recent topics are discussed for each application from a viewpoint of the algorithm and implementation. Sound demonstrations will be provided to help audience understand the effect of solutions.

Akihiko Sugiyama (a.k.a. Ken Sugiyama), affiliated with Yahoo! JAPAN Research, has been engaged in a wide variety of research projects in signal processing such as audio coding and interference/noise control. His team developed the world's first Silicon Audio in 1994, a precursor of iPod. He served as the Chair of Audio and Acoustic Signal Processing Technical Committee, IEEE Signal Processing Society (SPS) [2011-2012], as associate editors for several journals such as IEEE Trans. Signal Processing [1994-1996], as the Secretary and a Member at Large to the Conference Board of SPS [2010-2011], as a member of the Awards Board of SPS [2015-2017], as the Chair of Japan Chapter of SPS [2010-2011], and a member of IEEE Fellow Committee. He was a Technical Program Chair for ICASSP2012. He has contributed to 17 chapters of books and is the inventor of 217 registered patents with more pending applications in the field of signal processing in Japan and overseas. He received 17 awards such as the 2002 IEICE Best Paper Award, the 2006 IEICE Achievement Award, and the 2013 Ichimura Industry Award. He has delivered 117 invited talks in 48 cities of 20 countries. He is Fellow of IEEE and IEICE, and a Distinguished Lecturer for IEEE SPS [2014-2015] and for IEEE CE (Consumer Electronics Society) [2017-2018].

Sponsored by:

