

## Curriculum Vitae of Associate Professor Woon-Seng Gan



Woon-Seng Gan received his BEng (1st Class Hons) and PhD degrees, both in Electrical and Electronic Engineering from the University of Strathclyde, UK in 1989 and 1993 respectively. He is currently an Associate Professor in the School of Electrical and Electronic Engineering in Nanyang Technological University. He served as the deputy director, Centre for Signal Processing from 2007-2011, and Head of the Information Engineering Division in the School of Electrical and Electronic Engineering from 2011-2014. He is currently the Director of the Centre for Infocomm Technology in the School of Electrical and Electronic Engineering, Nanyang Technological University. His research has been concerned with the connections between the physical world, signal processing and sound control, which resulted in the practical demonstration and licensing of spatial audio algorithms, directional sound beam, and active noise control for headphones.

He has published more than 270 international refereed journals and conferences, and has granted seven Singapore/US/Japan patents. He had co-authored three books on *Digital Signal Processors: Architectures, Implementations, and Applications* (Prentice Hall, 2005), *Embedded Signal Processing with the Micro Signal Architecture*, (Wiley-IEEE, 2007), and *Subband Adaptive Filtering: Theory and Implementation* (John Wiley, 2009). His research has also garnered several local and international awards, which include the runner-up in the 1997/98 Worldwide Texas Instruments DSP Solution Challenge; the 2001 Institute of Engineering Singapore Prestigious Engineering Award; Best of Show (Blue Ribbon Award) in the 2011 TechVenture's Innovation Awards; and other IEEE societies awards.

He is currently a Fellow of the Audio Engineering Society(AES), a Fellow of the Institute of Engineering and Technology(IET), and a Senior Member of the IEEE. He served as an Associate Editor of the IEEE/ACM Transaction on Audio, Speech, and Language Processing (TASLP; 2012-15) and was presented with an outstanding TASLP editorial board service award in 2016. He is currently serving as Associate Technical Editor of the Journal of Audio Engineering Society (JAES; 2013-); Associate Editor of the IEEE Signal Processing Letters (2015-); Editorial member of the Asia Pacific Signal and

Information Processing Association (APSIPA; 2011-) Transactions on Signal and Information Processing; Associate Editor of the EURASIP Journal on Audio, Speech and Music Processing (2007-); Associate Editor for the IEICE transaction (2014-) on Fundamentals of Electronics, Communications and Computer Sciences(Japan).

He is currently sitting in the Board of Governor (2014-17) of the Asia Pacific Signal and Information Processing Association (APSIPA) and distinguished lecturer (2014-15) of the same association. He also served as member in the IEEE Signal Processing Education Technical Committee from 2009-2015; IEEE Signal Processing Design and Implementation of Signal Processing System from 2012-2015; and currently active in the IEEE Signal Processing Industry DSP committee and IEEE IoT special interest group. He also involved in organizing several flag-ship international conferences in EUSIPCO, European DSP Symposium, ICICS, and APSIPA.

His had garnered a combined research grant of more than S\$10 million dollars over the last 10 years (as PI) in competitive research grants from NRF(interactive digital media), NRF(proof-of-concept), NRF/MND(land and liveability), MoE Tier-2 grant, NEA innovation grant, and ASTAR. He is the founder and director of Immersive Sound Technology Pte Ltd, which develops and licenses audio processing algorithms for use in mobile applications, active noise control headsets, and directional sound systems. He also worked on several audio related industry projects with several multinational companies, which include Huawei Technologies Co. Ltd(China), Panasonic Singapore Lab, Philips Electronic Pte Ltd, Daimler Chrysler (Germany), Singapore Technology Electronic Pte Ltd, Singapore Technologies Kinetics Pte Ltd., and others.

More information on his recent academic and R&D achievement can be found in <http://www3.ntu.edu.sg/home/ewsgan/>

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