

ANNEX: BIOGRAPHY OF PROFESSOR CHEN TSUHAN



Professor Chen Tsuhan Deputy President (Research & Technology) and Distinguished Professor National University of Singapore

Professor Chen Tsuhan, a renowned expert in pattern recognition, computer vision, and machine learning, will be Deputy President (Research and Technology) and Distinguished Professor at the National University of Singapore from 1 June 2018. He is currently the Chief Scientist of AI Singapore, a national programme in artificial intelligence hosted at NUS.

Prof Chen joins NUS from the Cornell University, Ithaca, New York, United States, where he has been the David E. Burr Professor of Engineering since 2009. From 2009 to 2013, he served as the Director of the School of Electrical and Computer Engineering at Cornell. During his term as director, Prof Chen promoted the School to top ranking positions, and launched several initiatives to encourage innovation and to promote research and teaching excellence. He also directed the Advanced Multimedia Processing Laboratory, which conducts research in areas including computer vision and pattern recognition; multimedia coding and retrieval; as well as biometric authentication.

From 2015 to 2017, Prof Chen was the Cheng Tsang Man Chair Professor and Dean of the College of Engineering (CoE) at the Nanyang Technological University (NTU), Singapore. A strong supporter and driver of collaborative research, Prof Chen pioneered several support schemes at the NTU CoE to encourage inter-school multidisciplinary programmes aligned with the domain areas identified in RIE2020. These new initiatives included the Advanced Manufacturing and Engineering Centre, the Innovative Centre for Flexible Devices, and the Data Science & Artificial Intelligence Research Centre. Under his leadership, the NTU CoE also sealed partnerships to set up joint laboratories focusing on cyber-physical systems research with Taiwan's Delta Electronics, and rail transport capabilities with Singapore's SMRT Corporation.

From 1997 to 2008, Prof Chen was a professor with the Department of Electrical and Computer Engineering, Carnegie Mellon University, Pittsburgh, Pennsylvania, in the US. He served as the Associate Department Head from 2007 to 2008. Prof Chen founded and served as Director of the "ITRI Lab @ CMU," a collaborative research laboratory sponsored by Industrial Technology Research Institute (ITRI). He was also the Director of the International Collaboration on Advanced Security Technology at CyLab CMU, sponsored by Taiwan's National Science Council.

From 1993 to 1997, Prof Chen was with AT&T Bell Laboratories, Holmdel, New Jersey in the US. He received the MS and PhD degrees in electrical engineering from the California Institute of Technology, Pasadena, California, in 1990 and 1993, respectively, and the Bachelor of Science degree in electrical engineering from the National Taiwan University in 1987.

Prof Chen founded the Technical Committee on Multimedia Signal Processing, and the Multimedia Signal Processing Workshop, both in the Institute of Electrical and Electronics Engineers (IEEE) Signal Processing Society. His endeavour later evolved into the founding of the IEEE Transactions on Multimedia and the IEEE International Conference on Multimedia and Expo, both joining the efforts of multiple IEEE societies. Prof Chen was appointed the Editor-in-Chief for IEEE Transactions on Multimedia in 2002-2004, championing the growth of the journal in both frequencies and page numbers.

Prof Chen also served on the Editorial Board of IEEE Signal Processing Magazine and as Associate Editor for IEEE Trans. on Circuits and Systems for Video Technology, IEEE Trans. on Image Processing, IEEE Trans. on Signal Processing, and IEEE Trans. on Multimedia. He co-edited a book titled *Multimedia Systems, Standards, and Networks*.

Prof Chen received the Charles Wilts Prize for outstanding independent research in Electrical Engineering leading to a PhD degree at the California Institute of Technology in 1993. He was a recipient of the US National Science Foundation CAREER Award, titled "Multimodal and Multimedia Signal Processing," from 2000 to 2003. He received the Benjamin Richard Teare Teaching Award in 2006, the Eta Kappa Nu Award for Outstanding Faculty Teaching in 2007, both at the Carnegie Mellon University, and the Michael Tien Teaching Award in 2014 at the Cornell University.

Prof Chen has published more than 300 technical papers and holds 29 US patents. He was elected to the Board of Governors, 2007-2009, and a Distinguished Lecturer, 2007-2008, both with the IEEE Signal Processing Society. He served as Vice President in 2012-2013, and as President in 2013-2014, of the ECE Department Head Association and received the Robert M Janowiak Outstanding Leadership and Service Award in 2017. He is a member of the Phi Tau Phi Scholastic Honor Society, a Fellow of IEEE, and a Fellow of the Institute of Engineers, Singapore.