Tools for Cracking the Emotional Code in Speech

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Date: June 4, 2021 (Friday)
Time: 17:00 – 18:30 (HK Time)
Chair: Dr Puisan Wong
The seminar will be conducted via ZOOM

Online Registration:
(Please register by 5:00pm on June 3, 2021 (Thursday). The meeting ID and password will be sent to registrants by email.)

Abstract:
In this talk I will introduce a set of computational tools that can be used for conducting research on emotional prosody. ProsodyPro is a Praat script for systematic analysis of large amount of speech prosody data, and it generates detailed measurements of pitch, duration, intensity, voice quality and formant dispersion, all of which highly relevant for emotional prosody. qTAttrainer is a Praat-based modelling tool that can be used to manipulate speech intonation to simulate different types of emotional intonation that can be used as stimuli for testing the perception of emotions. Finally, VocalTractLab is a sophisticated articulatory synthesis system that can be used to generate highly diverse voice qualities associated with different emotional prosody that can be used to generate stimuli for perceptual studies.

About the speaker:
Yi Xu is Professor of Speech Sciences at University College London, United Kingdom. He received his Master of Experimental Phonetics degree from the Institute of Linguistics, Chinese Academy of Social Sciences in 1984, and PhD in Linguistics from the University of Connecticut in 1993. He was a postdoctoral fellow at Massachusetts Institute of Technology in 1994-1995. He later served as an Assistant Professor at Northwestern University and as a researcher at the University of Chicago and Haskins Laboratories. He has been teaching at University College London since 2004. Yi Xu has published widely since 1986, covering topics on the production, perception and theoretical modeling of tone, intonation, segment and the syllable. He has also done work on auditory feedback in speech production, emotional prosody, short-term memory in reading and computational simulation of phonetic acquisition. His early work was focused on how lexical tones in Mandarin were produced and perceived in connected speech. From this work he developed the Target Approximation (TA) model (Xu & Wang, 2001). The TA model was then extended to intonation in the form of the Parallel Encoding and Target Approximation (PENTA) model (Xu, 2005). His most recent work has extended TA to speech production in general, using it to explain coarticulation, syllable (Xu, 2020) and vocal learning of articulation.

~ All are welcome ~
For enquiries, please contact the Office of Research, Faculty of Education at hkchow@hku.hk.