

CONTENTS

Preface	v
List of Contributors	xi
Part I: Principles of CSLP	1
Chapter 1 Speech Analysis: The Production-Perception Perspective <i>L. Deng and J. Dang</i>	3
Chapter 2 Phonetic and Phonological Background of Chinese Spoken Languages <i>C.-C. Kuo</i>	33
Chapter 3 Prosody Analysis <i>C. Tseng</i>	57
Chapter 4 Tone Modeling for Speech Synthesis <i>S.-H. Chen, C. Tseng and H.-m. Wang</i>	77
Chapter 5 Mandarin Text-To-Speech Synthesis <i>R.-H. Wang, S.-H. Chen, J. Tao and M. Chu</i>	99
Chapter 6 Large Vocabulary Continuous Speech Recognition for Mandarin Chinese: Principles, Application Tasks and Prototype Examples <i>L.-s. Lee</i>	125
Chapter 7 Acoustic Modeling for Mandarin Large Vocabulary Continuous Speech Recognition <i>M.-Y. Hwang</i>	153
Chapter 8 Tone Modeling for Speech Recognition <i>T. Lee and Y. Qian</i>	179
Chapter 9 Some Advances in Language Modeling <i>C.-H. Chueh, M.-S. Wu and J.-T. Chien</i>	201
Chapter 10 Spontaneous Mandarin Speech Pronunciation Modeling <i>P. Fung and Y. Liu</i>	227

Chapter 11	Corpus Design and Annotation for Speech Synthesis and Recognition	243
	<i>A. Li and Y. Zu</i>	
Part II: CSLP Technology Integration		269
Chapter 12	Speech-to-Speech Translation	271
	<i>Y. Gao, L. Gu and B. Zhou</i>	
Chapter 13	Spoken Document Retrieval and Summarization	301
	<i>B. Chen, H.-m. Wang and L.-s. Lee</i>	
Chapter 14	Speech Act Modeling and Verification in Spoken Dialogue Systems	321
	<i>C.-H. Wu, J.-F. Yeh and G.-L. Yan</i>	
Chapter 15	Transliteration	341
	<i>H. Li, S. Bai and J.-S. Kuo</i>	
Chapter 16	Cantonese Speech Recognition and Synthesis	365
	<i>P. C. Ching, T. Lee, W. K. Lo and H. M. Meng</i>	
Chapter 17	Taiwanese Min-nan Speech Recognition and Synthesis	387
	<i>R.-y. Lyu, M.-s. Liang, D.-c. Lyu and Y.-c. Chiang</i>	
Chapter 18	Putonghua Proficiency Test and Evaluation	407
	<i>R.-H. Wang, Q. Liu and S. Wei</i>	
Part III: Systems, Applications and Resources		431
Chapter 19	Audio-Based Digital Content Management and Retrieval	433
	<i>B. Xu, S. Zhang and T. Huang</i>	
Chapter 20	Multilingual Dialog Systems	459
	<i>H. M. Meng</i>	
Chapter 21	Directory Assistance System	483
	<i>J.-K. Chen, C.-C. Yang and J.-S. Kuo</i>	
Chapter 22	Robust Car Navigation System	503
	<i>J.-F. Wang, H.-C. Wang and J.-C. Wang</i>	
Chapter 23	CSLP Corpora and Language Resources	523
	<i>H.-C. Wang, T. F. Zheng and J. Tao</i>	
Index		539