

Chin-Hui Lee

- INTERESTS

- Human-computer interface; multimedia communication; machine learning; multimedia signal processing; speech and audio processing; automatic speech recognition, speaker recognition and speech understanding; dialogue processing; language processing; human information processing; multimodal access; biometric authentication; information retrieval; pattern recognition; statistical signal modeling; adaptive algorithms; intelligent information processing; bioinformatics.

- EDUCATION

- **1977-1981**: PhD in EE, University of Washington, Seattle, Washington
- **1976-1977**: MS in EAS, Yale University, New Haven, Connecticut
- **1969-1973**: BS in EE, National Taiwan University, Taipei, Taiwan

- WORK

- **2001-present**: Professor, School of Computing, National University of Singapore
- **1996-2001**: Director, Bell Labs, Lucent Technologies, Murray Hill, NJ
- **1986-1996**: Distinguished Member of Technical Staff, Bell Labs, AT&T, Murray Hill, NJ
- **1984-1986**: Principal Scientist and DSP Manager, Digital Sound Corp., Santa Barbara, CA
- **1981-1984**: Senior Scientist, Verbex Corporation, Bedford, MA

- PROFESSIONAL SOCIETY ACTIVITIES, AWARDS AND HONORS

- Fellow of the IEEE (1997)
- Member, IEEE SPS Multimedia Signal Processing Technical Committee (1996-)
- Chairman, IEEE SPS Speech Signal Processing Technical Committee (1997-79)
- Associate Editor, IEEE Transactions on Speech and Audio Processing (1993-95)
- 2000 IEEE Signal Processing Society Distinguished Lecturer
- 1997 and 1999 IEEE Signal Processing Society Best Paper Award
- 1997 Bell Labs President's Gold Award
- 25 patents, 60 journal papers, 180 conference papers, 8 book chapters, 1 edited best seller and co-author with over 50 researchers

- EXTERNAL FUNDING

- PI, 1998-2000 DARPA Communicator Project, \$1M per year for two years
- PI, 1999-2001 NHK Broadcasting Transcription Project, \$350K per year for two years
- PI, 2000-2001 European Commission Orientel Project, \$300K per year for two years

- RECENT PUBLICATIONS

1. C.-H. Lee and Q. Huo, "On Adaptive Decision Rules and Decision Parameter Adaptation for Automatic Speech Recognition," *Proceedings of the IEEE*, Vol. 88, No. 8, pp. 1241-1269, 2000.
2. C.-H. Lee, R. Carpenter, W. Chou, J. Chu-Carroll, W. Reichl, A. Saad, and Q. Zhou, "On Natural Language Call Routing," *Speech Communication*, Vol. 31, pp. 309-320, 2000.
3. S. Katagiri, B.-H. Juang and C.-H. Lee, "Pattern Recognition Using A Generalized Probabilistic Descent Method," *IEEE Proceedings*, Vol. 86, No. 11, pp. 2345-2373, 1998.
4. T. Kawahara, C.-H. Lee and B.-H. Juang, "Key-Phrase Detection and Verification for Flexible Speech Understanding," *IEEE Trans. Speech and Audio Proc.*, Vol. 6, pp. 558-568, 1998.
5. C.-H. Lee, "Voice User Interface for New Services over Internet and Wireless Communication," *Korea Telecom Intern. Symposium - Cyber World's Technologies for the New Millennium*, 2000.