

李琳山著作目錄

A. *International Journals*

- IJ-1. James M. Janky, Bruce B. Lusignan, Lin-shan Lee, Eng-chong Ha, Edward F. Reinhart, “New Sidelobe Envelopes for Small Aperture Earth Stations”, IEEE Transactions on Broadcasting, Vol. BC-22, No. 2, Jun 1976, pp. 39-45, also collected in IEEE Press, “Interference Analysis in Communication Systems”, 1980, Edited by Peter Stavroulakis.
- IJ-2. Lin-shan Lee, “The Existence of a Zero-crosspolarization Mode Through Rain”, IEEE Transactions on Broadcasting, Vol. BC-23, No. 1, Mar 1977, pp. 6-12.
- IJ-3. Lin-shan Lee, “A Polarization Control System for Satellite Communications with Multiple Uplinks”, IEEE Transactions on Communications, Vol. COM-26, No. 8, Aug 1978, pp. 1201-1211.
- IJ-4. Lin-shan Lee, “Vector Space Theory of Rain Crosspolarization and Its Compensations”, IEEE Transaction on Communications, Vol. COM-27, No. 2, Feb 1979, pp. 502-509.
- IJ-5. Lin-shan Lee, “Statistical Reference Envelopes for Rain Crosspolarizations at Higher Frequencies for Use in System Design”, IEEE Transactions on Broadcasting, Vol. BC-25, No. 1, Mar 1979, pp. 19-24.
- IJ-6. James M. Janky, William T. Zaumen, Lin-shan Lee, “On Attaining Lower Sidelobes and new Antenna Envelopes for Better Orbit Spectrum Utilization in Satellite Broadcasting”, IEEE Transactions on Broadcasting, Vol. BC-25, No. 3, Sep 1979, pp. 73-79.
- IJ-7. Lin-shan Lee, “Polarization Control Schemes for Satellite Communications with Multiple Uplinks”, IEEE Transactions on Communications, Vol. COM-27, No. 10, Oct 1979, Special Issue on Satellite Communications, pp. 1504-1512.
- IJ-8. Lin-shan Lee, James M. Janky, “New Radiation Limits for a Digital Radio World”, IEEE Transactions on Communications, Vol. COM-27, No. 12, Dec 1979, Special Issue on Digital Radio, pp. 1910-1915.
- IJ-9. Lin-shan Lee, “The Feasibility of Two One-parameter Polarization Control Methods in Satellite Communications”, IEEE Transactions on Communications, Vol. COM-29, No. 5, May 1981, pp. 735-743.
- IJ-10. Fan-tung Tseng, Lin-shan Lee, “Accurate Detection of Satellite Beacon Polarization Using Cascaded Heterodyne Phase Locked Loops”, IEEE Transactions on Communications, Vol. COM-30, No. 1, Jan 1982, pp. 283-293.
- IJ-11. Lin-shan Lee, “A New Formulation of Spectrum-Orbit Utilization Efficiency for Satellite Communications in Interference-limited Situations”, IEEE Transactions on Communications, Vol. COM-32, No. 2, Feb 1984, pp. 212-214.
- IJ-12. Lin-shan Lee, Ger-chih Chou, Ching-sung Chang, “A New Frequency Domain Speech Scrambling System Which Does Not Require Frame Synchronization”, IEEE Transactions on Communications, Vol. COM-32, No. 4, Apr 1984, pp. 444-456.
- IJ-13. Lin-shan Lee, Ger-chih Chou, “A New Time Domain Speech Scrambling System which Does Not Require Frame Synchronization”, IEEE Journal on Selected Areas in Communications, Vol. SAC-2, No. 3, May 1984, Special Section on the Encryption of Analog Signals, pp. 443-455.
- IJ-14. Fan-tung Tseng, Lin-shan Lee, “An A, B-Polar Approach for Multi-mode Polarization Analysis in Satellite Communications”, IEEE Transactions on Communications, Vol. COM-32, No. 9, Sep 1984,

pp. 1045-1049.

- IJ-15. Fan-tung Tseng, Lin-shan Lee, “A Differential Technique for Detection of Circularly Polarized Satellite Signal Parameters at Low Axial Ratios”, IEEE Transactions on Communications, Vol. COM-32, No. 10, Oct 1984, pp. 1135-1139.
- IJ-16. Lin-shan Lee, “A Speech Security System Not Requiring Synchronization”, IEEE Communications Magazine, Vol. 23, No. 7, Jul 1985, pp. 42-55.
- IJ-17. Lin-shan Lee, Ger-chih Chou, “A General Theory for Asynchronous Speech Encryption Techniques”, IEEE Journal on Selected Areas in Communications, Vol. SAC-4, No. 2, Mar. 1986, Special Issue on Military Communications, pp. 280-287.
- IJ-18. Jung-Hui Chiu, Lin-shan Lee, “Minimum Likelihood – A New Concept for Symbol Synchronization”, IEEE Transactions on Communications, Vol. COM-35, No. 5, May 1987, pp. 545-549.
- IJ-19. Chia-hwa Hwang, Yen-ming Hsu, Biing-chin Wang, Chiu-yu Tseng, Lin-shan Lee, “Efficient Speech Recognition Techniques for the Finals of Mandarin Syllables”, International Journal of Pattern Recognition and Artificial Intelligence, Vol. 2, No. 1, Mar 1988, pp. 87-103, Also collected in Computer Processing of Chinese and Oriental Languages, Vol. 3, No. 3-4, Mar 1988, Special Issue on Intelligent Chinese Language Pattern and Speech Processing, pp. 257-273.
- IJ-20. Jung-Hui Chiu, Lin-shan Lee, “An Improved Sequential Estimation Scheme for PN Acquisition”, IEEE Transactions on Communications, Vol. COM-36, No. 10, Oct 1988, pp. 1182-1184.
- IJ-21. Hong-Kuang Hwang, Lin-shan Lee, Sin-Horng Chen, “Minimum Euclidean Distances of Partial Response Multi-h Phase-coded Modulations With Asymmetric Modulation Indices”, Electronics Letters, Vol. 25, No. 8, Apr 13 1989, pp. 510-511.
- IJ-22. Hong-Kuang Hwang, Lin-shan Lee, Sin-Horng Chen, “Bandwidth-power Performance Analysis of Multi-h Phase-coded Modulations with Asymmetric Modulation Indices”, Electronics Letters, Vol. 25, No. 11, May 25 1989, pp. 741-742.
- IJ-23. Ching-jiang Hsieh, Chiu-yu Tseng, Lin-shan Lee, “An Improved Chinese Text-to-speech System Based on Formant Synthesis Techniques”, Computer Processing of Chinese and Oriental Languages, Vol. 4, No. 2&3, Jul 1989, pp. 153-170.
- IJ-24. Lin-shan Lee, Chiu-yu Tseng, Ming Ouh-young, “The Synthesis Rules in A Chinese Text-to-speech System”, IEEE Transactions on Acoustics, Speech and Signal Processing, Vol. ASSP-37, No. 9, Sep 1989, pp. 1309-1320.
- IJ-25. Hong-Kuang Hwang, Lin-shan Lee, Sin-Horng Chen, “Multi-h Phase Coded Modulations with Asymmetric Modulation Indices”, IEEE Journal on Selected Areas in Communications, Vol. SAC-7, No. 9, Dec 1989, Special Issue on Bandwidth and Power Efficient Coded Modulations, pp. 1450-1461.
- IJ-26. Lee-Feng Chien, Lin-shan Lee, “A New Efficient Chinese Natural Language Processing System with Syllabic Input for Mandarin Dictation Applications”, Computer Processing of Chinese and Oriental Languages, Vol. 4, No. 4, Mar 1990, pp. 352-366.
- IJ-27. Guay-shya Chen, Ja-ling Wu, Lin-shan Lee, “Signal Extrapolation From Hartley Transform Magnitudes”, Electronics Letters, Vol. 26, No. 12, Jun 1990, pp. 793-794.
- IJ-28. Lin-shan Lee, Chiu-yu Tseng, K. J. Chen, James Huang, Chia-Hwa Hwang, Pei-Yih Ting, Long-Ji Lin, C. C. Chen, “A Mandarin Dictation Machine Based Upon A Hierarchical Recognition Approach and

- Chinese Natural Language Analysis”, IEEE Transactions on Pattern Analysis and Machine Intelligence, Vol. 12, No. 7, Jul 1990, pp. 695-704.
- IJ-29. Jung-hui Chiu, Lin-shan Lee, “Simplified Data Transition Tracking Loop - A New NRZ Maximum Likelihood Symbol Synchronizer”, Electronics Letters, Vol. 26, No. 17, Aug 1990, pp. 1417-1419.
- IJ-30. Pei-yih Ting, Chiu-yu Tseng, Lin-shan Lee, “An Efficient Speech Recognition System for the Initials of Mandarin Syllables”, International Journal of Pattern Recognition and Artificial Intelligence, Vol. 4, No. 4, Dec 1990, pp. 687-704.
- IJ-31. Jung-Hui Chiu, Lin-shan Lee, “Maximum Likelihood Synchronizers with Arbitrary Prior Symbol Probabilities”, IEE Proceedings-I, Communications, Speech and Vision, Vol. 138, No. 1, Feb 1991, pp. 50-52.
- IJ-32. Lin-shan Lee, Chiu-yu Tseng, Fu-hua Liu, C. H. Chang, Hung-yan Gu, S. H. Hsieh, C. H. Chen, “Special Speech Recognition Approaches for the Highly Confusing Mandarin Syllables Based on Hidden Markov Models”, Computer Speech and Language, Vol. 5, No. 2, Apr 1991, pp. 181-201.
- IJ-33. Lee-Feng Chien, K. J. Chen, Lin-shan Lee, “An Augmented Chart Data Structure with Efficient Word Lattice Parsing Scheme In Speech Recognition Applications”, Speech Communication, Vol. 10, No. 2, Jun 1991, pp. 129-144.
- IJ-34. Hung-yan Gu, Chiu-yu Tseng, Lin-shan Lee, “Isolated Utterance Speech Recognition Using Hidden Markov Models with Bounded-State Durations”, IEEE Transactions on Signal Processing, Vol. 39, No. 8, Aug 1991, 1743-1752.
- IJ-35. Hung-yan Gu, Chiu-yu Tseng, Lin-shan Lee, “Markov Modeling of Mandarin Chinese for Decoding the Phonetic Sequence into Chinese Characters”, Computer Speech and Language, Vol. 5, No. 4, Oct 1991, pp. 363-377.
- IJ-36. Lin-shan Lee, Chiu-yu Tseng, Yueh Hong Lin, Yumin Lee, Shih-Lung Tu, Hung-yan Gu, F.H. Liu, C.H. Chang, S.H. Hsieh, C.H. Chen, K.R. Huang, “System Description of Golden Mandarin (I) Voice Input System for Unlimited Chinese Characters”, Computer Processing of Chinese and Oriental Languages, Vol. 5, No. 4, Nov 1991, pp. 314-329.
- IJ-37. Lin-shan Lee, Lee-feng Chien, Long-ji Lin, James Huang, K. J. Chen , “An Efficient Natural Language Processing System Specially Designed for the Chinese Language”, Computational Linguistics, Vol. 17, No. 4, Dec 1991, pp. 347-374.
- IJ-38. Lin-shan Lee, Hong-Kuang Hwang, Sin-Horng Chen, “Asymmetric Modulation Indices in Full/Partial Response Multi-h Phase Coded Modulations with Different Phase Pulse Functions”, IEE Proceedings-I, Communications, Speech and Vision, Vol. 139, No. 5, Oct 1992, pp. 508-514.
- IJ-39. Lin-shan Lee, “Taiwan : Meeting the New Challenges” in “Special Issue on Engineering Education - A Global View”, IEEE Communications Magazine, Vol. 30, No. 11, Nov 1992. pp. 18-26.
- IJ-40. Fu-hua Liu, Yumin Lee, Lin-shan Lee, “A Direct Concatenation Approach to Train Hidden Markov Models to Recognize the Highly Confusing Mandarin Syllables with Very Limited Training Data”, IEEE Transactions on Speech and Audio Processing, Vol. 1, No. 1, Jan 1993, pp. 113-119.
- IJ-41. Lin-shan Lee, Chiu-yu Tseng, Hung-yan Gu, Fu-hua Liu, C. H. Chang, Y. H. Lin, Yumin Lee, S. L. Tu, S. H. Hsieh, C. H. Chen, “Golden Mandarin (I) - A Real-time Mandarin Speech Dictation Machine for Chinese Language with Very Large Vocabulary”, IEEE Transactions on Speech and Audio Processing, Vol. 1, No. 2, Apr 1993, pp. 158-179.

- IJ-42. Lee-Feng Chien, Keh-Jiann Chen, Lin-shan Lee, “A Best-first Language Processing Model Integrating the Unification Grammar and Markov Language Model for Speech Recognition Applications”, IEEE Transactions on Speech and Audio Processing, Vol. 1, No. 2, Apr 1993, pp. 221-240.
- IJ-43. Yumin Lee, Lin-shan Lee, “Continuous Hidden Markov Models Integrating Transitional and Instantaneous Features for Mandarin Syllable Recognition”, Computer Speech and Language, Vol. 7, No. 3, Jul 1993, pp. 247-263.
- IJ-44. Lin-shan Lee, Chiu-yu Tseng, Ching-Jiang Hsieh, “Improved Tone Concatenation Rules In A Formant Based Chinese Text-to-Speech System”, IEEE Transactions on Speech and Audio Processing, Vol. 1, No. 3, Jul 1993, pp. 287-294.
- IJ-45. Guey-Shya Chen, Ja-Ling Wu, Wei-Jou Duh, Lin-shan Lee, “A Novel Scaling Scheme for Fast Hartley Transform”, Signal Processing, Vol. 34, No. 1, Oct 1993, pp. 123-129.
- IJ-46. Jinn-Ja Chang, Lin-shan Lee, “An Exact Performance Analysis of the Clipped Diversity Combining Receiver for FH/MFSK Systems Against A Band Multitone Jammer”, IEEE Transactions on Communications, Vol. 42, No. 2/3/4, Feb/Mar/Apr 1994, pp. 700-710.
- IJ-47. Y. S. Kuo, Lin-shan Lee, “Taiwan Faces Challenges in Its Development of Software Industry”, Journal of Information Processing Society of Japan, Vol. 35 extra edition, Dec 1994, pp. 58-62.
- IJ-48. Hsin-min Wang, Renyuan Lyu, Jia-lin Shen, Lin-shan Lee, “Mandarin Syllable Recognition in Continuous Speech Under Limited Training Data with Sub-syllabic Acoustic Modeling”, International Journal of Computer Processing of Chinese and Oriental Languages, Vol. 8 Supplement, No. 2, Dec 1994, pp. 1-16.
- IJ-49. Cheng-kun Wang, Lin-shan Lee, “Practically Realizable Digital Transmission Significantly Below the Nyquist Bandwidth”, IEEE Transactions on Communications, Vol. 43, No. 2/3/4, Feb./Mar/Apr 1995, pp. 166-169.
- IJ-50. Jia-Lin Shen, Lin-shan Lee, “A Cepstrum Normalization Approach for Robust Mandarin Speech Recognition with Respect to Noise and Microphone Variations”, Computer Processing of Oriental Languages, Vol. 10, No. 2, Sep 1996, pp. 161-180.
- IJ-51. Yen-Ju Yang, Lee-Feng Chien, Lin-shan Lee, “Adaptive Linguistic Decoding System for Mandarin Speech Recognition Applications”, Computer Processing of Oriental Languages, Vol. 10, No. 2, Sep 1996, pp. 211-224.
- IJ-52. Ching-Hua Chuang, Lin-shan Lee, “A Coded Modulation Design with Equal Utilization of Signal Dimensions on Two Carrier Frequencies Using A Simple Convolutional Code”, IEICE Trans. Communications, Vol. E79-B, No. 10, Oct 1996, pp. 1537-1548.
- IJ-53. Hsin-Min Wang, Tai-Hsuan Ho, Rung-Chiung Yang, Jia-Lin Shen, Bo-Ren Bai, Jenn-Chau Hong, Wei-Peng Chen, Tong-Lo Yu, Lin-shan Lee, “Complete Recognition of Continuous Mandarin Speech for Chinese Language with Very Large Vocabulary Using Very Limited Training Data”, IEEE Trans. Speech and Audio Processing, Vol. 5, No. 2, Mar 1997, pp. 195-200.
- IJ-54. Jia-Chin Lin, Lin-shan Lee, “A Modified Code Tracking Loop for Direct-Sequence Spread Spectrum Systems on Frequency Selective Fading Channels”, IEICE Trans. Communications, Vol. E80-B, No. 7, Jul 1997, pp. 1055-1063.
- IJ-55. Lin-shan Lee, “Voice Dictation of Mandarin Chinese”, IEEE Signal Processing Magazine, Vol. 14, No. 4, Jul 1997, pp. 63-101.

- IJ-56. Bo-Ren Bai, Chun-Liang Chen, Lee-Feng Chien, Lin-shan Lee, “Intelligent Retrieval of Dynamic Networked Information from Mobile Terminals Using Spoken Natural Language Queries”, IEEE Transactions on Consumer Electronics, Vol. 44, No. 1, Feb 1998, pp. 62-72.
- IJ-57. Ren-Yuan Lyu, I-Chung Hong, Jia-Lin Shen, Ming-Yu Lee, Lin-shan Lee, “Isolated Mandarin Syllable Recognition Based Upon the Segmental Probability Models (SPM)”, IEEE Trans. Speech and Audio Processing, Vol. 6, No. 3, May 1998, pp. 293-299.
- IJ-58. Jia-lin Shen, Hsin-min Wang, Ren-yuan Lyu, Lin-shan Lee, “Automatic Selection of Phonetically Distributed Sentence Sets for Speaker Adaptation with Application to Large Vocabulary Mandarin Speech Recognition”, Computer Speech and Language, Vol. 13, No. 1, Jan. 1999, pp. 79-97.
- IJ-59. Jia-Chin Lin, Lin-shan Lee, “Joint Blind Multipath Diversity Combining and PN Code Timing Recovery for Direct-Sequence Spread-Spectrum Systems”, IEICE Transactions on Communications, Vol. E82-B, No. 9, Sep 1999, pp. 1470-1484.
- IJ-60. Lin-shan Lee, Yumin Lee, “Voice Access of Global Information for Broadband Wireless: Technologies of Today and Challenges of Tomorrow” (invited paper), Proceedings of the IEEE, Vol. 89, No. 1, Jan. 2001, pp. 41-57.
- IJ-61. Bor-shen Lin, Lin-shan Lee, “Computer-aided Analysis and Design for Spoken Dialogue Systems Based on Quantitative Simulations”, IEEE Transactions on Speech and Audio Processing, Vol. 9, No. 5, Jul 2001, pp. 534-548.
- IJ-62. Jieh-weih Hung, Jia-lin Shen, Lin-shan Lee, “New Approaches for Domain Transformation and Parameter Combination for Improved Accuracy in Parallel Model Combination (PMC) Techniques”, IEEE Transactions on Speech and Audio Processing, Vol. 9, No. 8, Nov 2001, pp. 842-855.
- IJ-63. Bor-shen Lin, Berlin Chen, Hsin-min Wang, Lin-shan Lee, “A Hierarchical Tag-graph Search with Layered Grammar Rules for Spontaneous Speech Understanding”, Pattern Recognition Letters, 23 (2002), pp. 819-831.
- IJ-64. Berlin Chen, Hsin-Min Wang, Lin-shan Lee, “Discriminating Capabilities of Syllable-based Features and Approaches of Utilizing Them for Voice Retrieval of Speech Information in Mandarin Chinese”, IEEE Transactions on Speech and Audio Processing, Vol. 10, No. 5, Jul 2002, pp. 303-314.
- IJ-65. Fu-Chiang Chou, Chiu-Yu Tseng, Lin-shan Lee, “A Set of Corpus-based Text-to-speech Synthesis Technologies for Mandarin Chinese”, IEEE Transactions on Speech and Audio Processing, Vol. 10, No. 7, Oct 2002, pp. 481-494.
- IJ-66. Berlin Chen, Hsin-min Wang, Lin-shan Lee, “A Discriminative HMM/N-gram-Based Retrieval Approach for Mandarin Spoken Documents”, ACM Transactions on Asian Language Information Processing, Vol. 3, No. 2, Jun 2004, pp. 128-145.
- IJ-67. Yu Tsao, Shang-Ming Lee, Lin-shan Lee, “Segmental Eigenvoice with Delicate Eigenspace for Improved Speaker Adaptation”, IEEE Transactions on Speech and Audio Processing, Vol. 13, No. 3, May 2005, pp. 399-411.
- IJ-68. Lin-shan Lee, Berlin Chen, “Spoken Document Understanding and Organization”, IEEE Signal Processing Magazine, Special Issue on Speech Technology in Human-machine Communication, Vol. 22, No. 5, Sep 2005, pp. 42-60.
- IJ-69. Jieh-Wei Hung, Lin-shan Lee, “Optimization of Temporal Filters for Constructing Robust Features in Speech Recognition”, IEEE Transactions on Speech and Audio Processing, Vol. 14, No. 3, May 2006,

pp. 808-832.

- IJ-70. Gwo-Hwa Ju, Lin-shan Lee, “A Perceptually Constrained GSVD-based Approach for Enhancing Speech Corrupted by Colored Noise”, IEEE Transactions on Audio, Speech and Language Processing, Vol. 15, No. 1, Jan 2007, pp. 119-134.
- IJ-71. Ming-Yi Tsai, Fu-Chiang Chou, Lin-shan Lee, “Pronunciation Modeling with Reduced Confusion for Mandarin Chinese Using A Three-stage Framework”, IEEE Transactions on Audio, Speech and Language Processing, Vol. 15, No. 2, Feb 2007, pp. 661-675.
- IJ-72. Chia-Yu Wan, Lin-shan Lee, “Histogram-Based Quantization for Robust and/or Distributed Speech Recognition”, IEEE Transactions on Audio, Speech and Language Processing, Vol. 16, No. 4, May 2008, pp. 859-873.
- IJ-73. Chang-wen Hsu, Lin-shan Lee, “Higher Order Cepstral Moment Normalization for Improved Robust Speech Recognition”, IEEE Transactions on Audio, Speech and Language Processing, Vol. 17, No. 2, Feb 2009, pp. 205-220.
- IJ-74. Che-Kuang Lin, Lin-shan Lee, “Improved Features and Models for Detecting Edit Disfluencies in Transcribing Spontaneous Mandarin Speech”, IEEE Transactions on Audio, Speech and Language Processing, Vol. 17, No. 7, Sep 2009, pp. 1263-1278.
- IJ-75. Yi-Cheng Pan, Lin-shan Lee, “Performance Analysis for Lattice-Based Speech Indexing Approaches Using Words and Subword Units”, IEEE Transactions on Audio, Speech and Language Processing, Vol. 18, No. 6, Aug 2010, pp. 1562-1574.
- IJ-76. Sheng-Yi Kong, Lin-shan Lee, “Semantic Analysis and Organization of Spoken Documents Based on Parameters Derived from Latent Topics”, IEEE Transactions on Audio, Speech and Language Processing, Vol. 19, No. 7, Sep 2011, pp. 1875-1889.
- IJ-77. Yi-Cheng Pan, Hung-yi Lee, Lin-shan Lee, “Interactive Spoken Document Retrieval with Suggested Key Terms Ranked by a Markov Decision Process”, IEEE Transactions on Audio, Speech and Language Processing, Vol. 20, No. 2, Feb 2012, pp. 632-645.
- IJ-78. Liang-Che Sun, Lin-shan Lee, “Modulation Spectrum Equalization for Improved Robust Speech Recognition”, IEEE Transactions on Audio, Speech and Language Processing, Vol. 20, No. 3, Mar 2012, pp. 828-843.
- IJ-79. Hung-yi Lee, Chia-Ping Chen, Lin-shan Lee, “Integrating Recognition and Retrieval with Relevance Feedback for Spoken Term Detection”, IEEE Transactions on Audio, Speech and Language Processing, Vol. 20, No. 7, Sep 2012, pp. 2095-2110.
- IJ-80. Hung-yi Lee, Lin-shan Lee, “Enhanced Spoken Term Detection Using Support Vector Machines and Weighted Pseudo Examples”, IEEE Transactions on Audio, Speech and Language Processing, Vol. 21, No. 6, Jun 2013, pp. 1272-1284.
- IJ-81. Chun-an Chan, Lin-shan Lee, “Model-based Unsupervised Spoken Term Detection with Spoken Queries”, IEEE Transactions on Audio, Speech, and Language Processing, Vol. 21, No. 7, Jul 2013, pp. 1330-1342.
- IJ-82. Yow-Bang Wang, Shang-Wen Li, Lin-shan Lee, “An Experimental Analysis on Integrating Multi-Stream Spectro-Temporal, Cepstral and Pitch Information for Mandarin Speech Recognition”, IEEE Transactions on Audio, Speech, and Language Processing, Vol. 21, No. 10, Oct 2013, pp. 2006-2014.

- IJ-83. Hung-yi Lee, Lin-shan Lee, “Improved Semantic Retrieval of Spoken Content by Document/Query Expansion with Random Walk over Acoustic Similarity Graphs”, IEEE/ACM Transactions on Audio, Speech, and Language Processing, Vol. 22, No. 1, Jan 2014, pp. 80-94.
- IJ-84. Hung-yi Lee, Sz-Rung Shiang, Ching-Feng Yeh, Yun-Nung Chen, Yu Huang, Sheng-Yi Kong, Lin-shan Lee, “Spoken Knowledge Organization by Semantic Structuring and a Prototype Course Lecture System for Personalized Learning”, IEEE/ACM Transactions on Audio, Speech, and Language Processing, Vol. 22, No. 5, May 2014, pp. 883-898.
- IJ-85. Hung-yi Lee, Po-wei Chou, Lin-shan Lee, “Improved Open-vocabulary Spoken Content Retrieval with Word and Subword Lattices Using Acoustic Feature Similarity”, Computer Speech & Language, Vol. 28, Issue 5, Sep 2014, pp. 1045-1065.
- IJ-86. Pei-hao Su, Chuan-hsun Wu, Lin-shan Lee, “A Recursive Dialogue Game for Personalized Computer-Aided Pronunciation Training”, IEEE/ACM Transactions on Audio, Speech and Language Processing, Vol. 23, No. 1, Jan 2015, pp. 127-141.
- IJ-87. Yow-Bang Wang, Lin-shan Lee, “Supervised Detection and Unsupervised Discovery of Pronunciation Error Patterns for Computer-Assisted Language Learning”, IEEE/ACM Transactions on Audio, Speech and Language Processing, Vol. 23, No. 3, Mar 2015, pp. 564-579.
- IJ-88. Ching-Feng Yeh, Lin-shan Lee, “An Improved Framework for Recognizing Highly Imbalanced Bilingual Code-Switched Lectures with Cross-Language Acoustic Modeling and Frame-Level Language Identification”, IEEE/ACM Transactions on Audio, Speech and Language Processing, Vol. 23, No. 7, Jul 2015, pp. 1144-1159.
- IJ-89. Lin-shan Lee, James Glass, Hung-yi Lee, Chun-an Chan, “Spoken Content Retrieval - Beyond Cascading Speech Recognition with Text Retrieval”, IEEE/ACM Transactions on Audio, Speech and Language Processing, Vol. 23, No. 9, Sep 2015, pp. 1389-1420.
- IJ-90. Aaron Heidel, Hsiang-Hung Lu, Lin-shan Lee, “Finding Complex Features for Guest Language Fragment Recovery in Resource-Limited Code-Mixed Speech Recognition”, IEEE/ACM Transactions on Audio, Speech and Language Processing, Vol. 23, No. 12, Dec 2015, pp. 2148-2161.
- IJ-91. Cheng-Tao Chung, Cheng-Yu Tsai, Chia-Hsiang Liu, Lin-shan Lee “Unsupervised Iterative Deep Learning of Speech Features and Acoustic Tokens with Applications to Spoken Term Detection”, IEEE/ACM Transactions on Audio, Speech and Language Processing, Vol. 23, No. 10, Oct 2017, pp.1914-1928.
- IJ-92. Cheng-Tao Chung, Lin-shan Lee “Unsupervised Discovery of Structured Acoustic Tokens with Applications to Spoken Term Detection”, IEEE/ACM Transactions on Audio, Speech and Language Processing, Vol. 26, No. 2, Feb 2018, pp.394-405.

B. International Conferences

- IC-1. Lin-shan Lee, “The Compensating Eigenvectors of the Rain Crosspolarization Effects”, The International Symposium on Antennas and Propagations, IEEE, Stanford University, CAL, U. S. A., Jun 1977, pp. 500-502.
- IC-2. Lin-shan Lee, “The Existence of A Zero-crosspolarization Mode Through Rain”, The International Conference on Communications, IEEE, Chicago, ILL, U. S. A., Jun 1977, pp. 8.1.161-8.1.167.
- IC-3. Lin-shan Lee, “Reduction of Rain Crosspolarization by Its Dependence on Polarization Directions”,

- The International symposium on Microwave Theory and Technology, IEEE, San Diego, CAL, U. S. A., Jun 1977, pp. 550-553.
- IC-4. Lin-shan Lee, “New Automatic Polarization Control for Multiple-station Satellite Communication Systems”, The International Conference on Communications, IEEE, Toronto, Canada, Jun 1978, pp. 43.3.1-43.3.5.
- IC-5. Lin-shan Lee, “Tradeoff Between Copolar Fading and Crosspolar Interference in Earth Station Design for Satellite Communications”, The International Conference on Communications, IEEE, Boston, MASS, U. S. A., Jun 1979, pp. 40.1.1-40.1.5.
- IC-6. Lin-shan Lee, “Partial Polarization Compensation in Satellite Communications Using Simple Control Methods”, The International Conference on Communications, IEEE, Jun 1980, Seattle, WA, U. S. A., pp. 51.6.1-51.6.5.
- IC-7. Lin-shan Lee, Yu-ping Harn, Yih-cheng Chen, “A Simple Sample Value Scrambler Using FFT Algorithms for Secure Voice Communications”, The National Telecommunications Conference, IEEE, Houston, TX, U. S. A., Dec 1980, pp. 49.4.1-49.4.5.
- IC-8. Lin-shan Lee, Ger-chih Chou, “New Results on Sampling-based Scrambling Techniques for Secure Speech Communications”, IEEE Workshop on Communication Security, Santa Barbara, Calif, Aug 1981.
- IC-9. Ger-chih Chou, Lin-shan Lee, “A New Efficient Speech Scrambling Algorithm Which Does Not Require Frame Synchronization”, First International Workshop on VLSI in Communications, IEEE, Santa Barbara, Calif, U. S. A., Sep 1981.
- IC-10. Ger-chih Chou, Lin-shan Lee, “A New Efficient and Practical DFT Scrambling System for Secure Speech Communications”, National Telecommunications Conference, IEEE, New Orleans, LA, U. S. A., Dec 1981, pp. E8.5.1-E8.5.5.
- IC-11. Lin-shan Lee, “The Practical Tradeoff Among Bandwidth Efficiency, Modulation Schemes, Availability, and Cost in Satellite Communications System Design Considerations”, National Telecommunications Conference, IEEE, New Orleans, LA, U. S. A., Dec 1981, pp. G10.2.1 - G-10.2.5.
- IC-12. Lin-shan Lee, Yi-Ping Hung, “The Simulation Results and Hardware Implementation of A New Time Domain Speech Scrambling Algorithm”, International Conference on Circuits and Computers, IEEE, New York, NY, U. S. A., Sep 1982, pp, 478-481.
- IC-13. Fan-tung Tseng, Lin-shan Lee, “The P, Q-plane Approach for Restoring the Polarization Orthogonality In A Multiple Access Satellite System”, 1982 Global Telecommunications Conference, IEEE, Miami, Fl, U.S.A., Dec 1982, pp. F5.6.1-F5.6.5.
- IC-14. Ger-chih Chou, Lin-shan Lee, “An Efficient time Domain Sample Value Scrambling Scheme Eliminating Frame Synchronization Requirement for Secure Speech Communications”, 1982 Global Telecommunications Conference, IEEE, Miami, Fl, U.S.A., Dec 1982, pp. B7.6.1 - B7.6.5.
- IC-15. Lin-shan Lee, Ger-chih Chou, “Asynchronous Speech Encryption Techniques - Formulation and Simulation”, 1983 Military Communications Conference, IEEE, Washington D. C., U. S. A., Oct 1983, pp. 791-795.
- IC-16. Lin-shan Lee, Ger-chih Chou, “A General Theory for Asynchronous Speech Encryption Techniques”, 1983 Global Telecommunications Conference, IEEE, San Diego, CA, U.S.A. , Nov 1983, pp.

1080-1084.

- IC-17. Shiann-ning Jean, Lin-shan Lee, “An Efficient Low Bit Rate Speech Coder With Simplified Algorithms”, 1983 Global Telecommunications Conference, IEEE, San Diego, CA, U.S.A., Nov 1983, pp. 799-803.
- IC-18. Lin-shan Lee, “Recent Results on Scrambling Techniques for Secure Speech Communications”, 1984 International Canahan Conference on Security Technology, Lexington, Kentucky, U.S.A., May 1984, pp. 109-113.
- IC-19. Ming Ouh-young, Chen-chao Chu, Lin-shan Lee, “A New Simplified Algorithm for Multi-pulse Linear Predictive Speech Coding”, 1984 Global Telecommunications Conference, IEEE, Atlanta, Georgia, U.S.A., Nov 1984, pp. 282-286.
- IC-20. Jung-Hui Chiu, Lin-shan Lee, “The Minimum Likelihood Bit Synchronizer for NRZ Signals”, 1984 Global Telecommunications Conference, IEEE, Atlanta, Georgia, U.S.A., Nov 1984, pp. 219-223.
- IC-21. Jung-Hui Chiu, Lin-shan Lee, “The Cascaded Sequence Spread Spectrum System”, 1984 Global Telecommunications Conference, IEEE, Atlanta, Georgia, U.S.A., Nov 1984, pp. 984-988.
- IC-22. Jung-Hui Chiu, Lin-shan Lee, “Matched Filtered Cascaded Sequence - An Improved Sequential Estimation Acquisition Scheme for Spread Spectrum Systems”, 1985 Global Telecommunications Conference, IEEE, New Orleans, LA, U.S.A. Dec 1985, pp. 494-498.
- IC-23. Jung-Hui Chiu, Lin-shan Lee, “Reduced Bandwidth Spread Spectrum - A New Speech Scrambling Technique for Secure Communications”, 1985 Global Telecommunications Conference, IEEE, New Orleans, LA, U.S.A., Dec 1985, pp. 1415-1419.
- IC-24. Ming Ouh-young, Chiu-yu Tseng and Lin-shan Lee, “A Chinese Text-to-speech System Based on A Syllable Concatenation Model”, 1986 International Conference on Acoustic, Speech and Signal Processing, IEEE, Apr 1986, Tokyo, Japan, pp. 2439-2442.
- IC-25. Jung-Hui Chiu, Lin-shan Lee, “Closed-Form Statistical Analysis for Square Law PN Acquisition Detector Performance in Spread Spectrum System”, International Conference on Communications, IEEE, Toronto, Canada, Jun 1986.
- IC-26. Long-ji Lin, K. J. Chen, James Huang, Lin-shan Lee, “A Chinese Natural Language Processing System Based Upon the Theory of Empty Categories”, Fifth National Conference on Artificial Intelligence, AAAI, Aug 1986, Philadelphia, PA, U.S.A., pp. 1059-1062.
- IC-27. Long-ji Lin, James Huang, K. J. Chen, Lin-shan Lee, “SASC: A Syntactic Analysis System for Chinese Sentences”, 1986 International Conference on Chinese Computing, Aug 1986, Singapore, pp. 29-32.
- IC-28. C. C. Chen, K. J. Chen, Lin-shan Lee, “A Model for Lexical Analysis and Parsing of Chinese Sentences”, 1986 International Conference on Chinese Computing, Aug 1986, Singapore, pp. 33-40.
- IC-29. Ming Ouh-young, Ching-jiang Hsieh, Chiu-yu Tseng, Lin-shan Lee, “A Chinese Text-to-speech System for the Voice Output of Chinese Computers”, 1986 International Conference on Chinese Computing, Aug 1986, Singapore, pp. 165-167.
- IC-30. Ming-shing Yu, Guey-shya Chen, Chia-Chuan Hsiao, Chiu-yu Tseng, Lin-shan Lee, “A Preliminary Approach to Complete Vocabulary Mandarin Syllable Recognition”, 1986 International Conference on Chinese Computing, Aug 1986, Singapore, pp. 168-171.
- IC-31. Chieh-hsiung Kuan, Lin-shan Lee, “New Computation Reduction and Pulse-Search Approaches for

- Multi-pulse LPC”, Third European Signal Processing Conference, Sep 1986, the Hague, The Netherland, pp. 497-500.
- IC-32. Ming-shing Yu, Guey-shya Chen, Chia-chuan Hsiao, Chiu-yu Tseng, Lin-shan Lee, “A Cascaded Two-phase Approach to Isolated Syllable Recognition for Mandarin Chinese Speech”, Third European Signal Processing Conference, Sep 1986, the Hague, The Netherland, pp. 525-528.
- IC-33. Jung-Hui Chiu, Lin-shan Lee, “A Unified Structure of Maximum Likelihood Synchronizers with Arbitrary Symbol Probabilities”, Global Telecommunications Conference, IEEE, Nov 1986, Houston, TX, U.S.A., pp. 1341-1345.
- IC-34. Chia-wha Hwang, Chiu-yu Tseng, Lin-shan Lee, “An Efficient Recognition System for the Finals of Mandarin Syllables Based on Branch-and-bound Algorithm”, 1987 International Conference on Chinese Computing, Jun 1987, Chicago, ILL, U.S.A., pp. 36-40.
- IC-35. Yen-ming Hsu, Biing-ching Wang, Chiu-yu Tseng, Lin-shan Lee, “Two New Efficient Techniques to Recognize the Finals of Mandarin Syllables”, 1987 International Conference on Chinese Computing, Jun 1987, Chicago, ILL, U.S.A., pp. 24-31.
- IC-36. Yen-shing Tsai, I-peng Lin, Lin-shan Lee, “Parsing Chinese Conjunctions Using SASC”, 1987 International Conference on Chinese Computing, Jun 1987, Chicago, ILL, U.S.A., pp. 94-99.
- IC-37. Lin-shan Lee, Chiu-yu Tseng, K. J. Chen, James Huang, “A Mandarin Dictation Machine Based Upon Chinese Natural Language Analysis”, The 10th International Joint Conference on Artificial Intelligence, AAAI, Aug 1987, Milano, Italy, pp. 619-621.
- IC-38. Jung-Hui Chiu, Lin-shan Lee, “The Simplified Data Transition Tracking loop - A New Approximation of NRZ Maximum Likelihood Symbol Synchronizer”, Global Telecommunications Conference, IEEE, Nov 1987, Tokyo, Japan, pp. 34.8.1-34.8.5.
- IC-39. Jung-Hui Chiu, Lin-shan Lee, “Minimum Likelihood Versus Maximum Likelihood Synchronization”, The 1987 Symposium on Information Theory and Its Applications, Nov 1987, Enoshima Island, Japan, pp. 933-937.
- IC-40. Pei-Yih Ting, Chiu-yu Tseng, Lin-shan Lee, “New Speech Recognition Approaches Based Upon Finite State Vector Quantization With Structural Constraints”, 1988 International Conference on Acoustics, Speech and Signal Processing, IEEE, Apr 1988, New York, U.S.A., pp. 187-190.
- IC-41. Kuen-Tsair Lay, Hen-wai Tsao, Lin-shan Lee, “A Decision-Aided Adaptive Equalizer With Simplified Implementation”, 1988 International Conference on Communications, IEEE, Jun 1988, Philadelphia, U.S.A., pp. 1385-1389.
- IC-42. Lin-shan Lee, Ming Ouh-young, “Voice and Text Messaging - A Concept to Integrate the Services of Telephone and Data Networks”, 1988 International Conference on Communications, IEEE, Jun 1988, Philadelphia, U.S.A., pp. 408-412.
- IC-43. Ching-Jiang Hsieh, Chiu-yu Tseng, Lin-shan Lee, “An Improved Chinese Text-to-speech System Based on Formant Synthesis Techniques”, 1988 International Conference on Chinese Computing, Toronto, Canada, Aug 1988, pp. 536-539.
- IC-44. Pei-Yih Ting, Chiu-yu Tseng, Lin-shan Lee, “An Efficient Speech Recognition System for Mandarin Consonants Using Finite State Vector Quantization”, 1988 International Conference on Chinese Computing, Toronto, Canada, Aug 1988, pp. 540-544.
- IC-45. Chien-hsing Wu, Chiu-yu Tseng, Lin-shan Lee, “Efficient Recognition Techniques for Unvoiced

- Mandarin Consonants Using Statistical Markov Models”, 1988 International Conference on Chinese Computing, Toronto, Canada, Aug 1988, pp. 546-550.
- IC-46. Lee-feng Chien, Lin-shan Lee, “A Chinese Sentence Parsing Strategy for Speech Recognition Applications”, 1988 International Conference on Chinese Computing, Toronto, Canada, Aug 1988, pp. 551-555.
- IC-47. Pei-Yih Ting, Chiu-yu Tseng, Lin-shan Lee, “Efficient Speech Recognition Approaches Using Timing Structural Constraints on Hidden Markov Models and Vector Quantization”, Fourth European Signal Processing Conference, EURASIP, Grenoble, France, Sep 1988, pp. 1169-1172.
- IC-48. Hong-Kuang Hwang, Lin-shan Lee, Sin-Horng Chen, “Multi-h Phase Coded Modulations with Asymmetric Modulation Indices”, Global Telecommunications Conference, IEEE, Hollywood, FL, U.S.A., Nov 1988.
- IC-49. Lin-shan Lee, Chiu-yu Tseng, Hung-yan Gu, Fu-hua Liu, “An Improved Mandarin Speech Dictation Machine for Intelligent Terminals of Advanced Communication Networks”, Global Telecommunications Conference, IEEE, Dallas, TX, U.S.A., Nov 1989, pp. 965-969.
- IC-50. Lin-shan Lee, Chiu-yu Tseng, Hung-yan Gu, Keh-jiann Chen, Fu-hua Liu, C. H. Chang, S. H. Hsieh, C. H. Chen, “A Real-time Mandarin Dictation Machine for Chinese Language with Unlimited Texts and Very Large Vocabulary”, International Conference on Acoustics, Speech and Signal Processing, IEEE, Albuquerque, NM, U.S.A., Apr 1990, pp. 65-68.
- IC-51. Lee-feng Chien, Keh-jiann Chen, Lin-shan Lee, “An Augmented Chart Parsing Algorithm Integrating Unification Grammar and Markov Language Model for Continuous Speech Recognition”, International Conference on Acoustics, Speech, and Signal Processing, IEEE, Albuquerque, NM, U.S.A., Apr 1990, pp. 585-588.
- IC-52. Lee-Feng Chien, K. J. Chen, Lin-shan Lee, “An Augmented Chart Data Structure with Efficient Word Lattice Parsing Scheme in Speech Recognition Applications”, 13th International Conference on Computational Linguistics, Helsinki, Finland, Aug 1990, Vol. 2, pp. 60-65.
- IC-53. Hung-yan Gu, Chiu-yu Tseng, Lin-shan Lee, “Isolated Utterance Speech Recognition Using Hidden Markov Models with Bounded State Durations”. V European Signal Processing Conference, EURASIP, Barcelona, Spain, Sep 1990, pp. 1283-1286.
- IC-54. Cheng-kun Wang, Lin-shan Lee, Yumin Lee, “Trellis Coded Partial Response Signaling for Power and Bandwidth Efficient Digital Transmission”, Global Telecommunications Conference, IEEE, San Diego, CA, U.S.A., Nov 1990, pp. 2014-2018.
- IC-55. Lin-shan Lee, Chiu-yu Tseng, Y.H. Lin, Y. Lee, S. L. Tu, Hung-yan Gu, F. H. Liu, C. H. Chang, S. H. Hsieh, C. H. Chen, K. R. Huang, “A Fully Parallel Mandarin Speech Recognition System with Very Large Vocabulary and Almost Unlimited Texts”, International Symposium on Circuits and Systems, IEEE, Singapore, Jun 1991, pp. 578-581.
- IC-56. Lee-Feng Chien, K. J. Chen, Lin-shan Lee, “A Preference-first Language Processor Integrating the Unification Grammar and Markov Language Model for Speech Recognition Applications”, 29th Annual Meeting of the Association for Computational Linguistics, ACL, Berkeley, CA, U.S.A., Jun 1991, pp. 293-298.
- IC-57. Lin-shan Lee, Chiu-yu Tseng, Yueh Hong Lin, Yumin Lee, Shih-Lung Tu, Hung-Yan Gu, Fu-Hua Liu, C. H. Chang, S. H. Hsieh, C. H. Chen, K. R. Huang, “System Description of the Golden Mandarin (I)

- Voice Input System for Unlimited Chinese Characters”, 1991 International Conference on Computer Processing of Chinese and Oriental Languages, CLCS, Taipei, Taiwan, Republic of China, Aug 1991, pp. 45-50.
- IC-58. Lee-Feng Chien, Keh-Jiann Chen, Lin-shan Lee, “An Efficient and Intelligent Chinese Linguistic Decoding System for Very Large Vocabulary Mandarin Speech Recognition”, 1991 International Conference on Computer Processing of Chinese and Oriental Languages, CLCS, Taipei, Taiwan, Republic of China, Aug 1991, pp. 182-187.
- IC-59. Fu-hua Liu, Yumin Lee, Lin-shan Lee, “Performance Analysis on A Direct Concatenation Approach to Train Hidden Markov Models to Recognize Mandarin Syllables with Very Limited Training Data”, 1991 International Conference on Computer Processing of Chinese and Oriental Languages, CLCS, Taipei, Taiwan, Republic of China, Aug 1991, pp. 241-246.
- IC-60. Chih-Heng Lin, Lin-shan Lee, “An Initial Study on Mandarin Syllable Recognition Based on Subsyllabic Units”, 1991 International Conference on Computer Processing of Chinese and Oriental Languages, CLCS, Taipei, Taiwan, Republic of China, Aug 1991, pp. 302-306.
- IC-61. Jinn-Ja Chang, Lin-shan Lee, “Anti-jamming Performance Analysis for FH/MFSK Systems with Clipped Diversity Combining Receivers”, 1991 Trans Pacific Electronic Warfare Symposium, AOC, Taipei, Taiwan, Republic of China, Sep 1991, pp. 51-55.
- IC-62. Lin-shan Lee, Chiu-yu Tseng, Fu-hua Liu, C. H. Chang, Hung-yan Gu, S.H. Hsieh, C. H. Chen, “Special Speech Recognition Approaches for the Highly Confusing Mandarin Syllables Based on Hidden Markov Models”, The First ROC-Japan Seminar on New Speech Recognition Methods, Hsinchu, Taiwan, Republic of China, Nov 1991, pp. 1-21.
- IC-63. Cheng-Kun Wang, Lin-shan Lee, “Practically Realizable Power Efficient Digital Transmission Significantly Below the Nyquist Bandwidth”, 1991 Global Telecommunications Conference, IEEE, Phoenix, AZ, U.S.A., Dec 1991, pp. 1187-1191.
- IC-64. I-Hung Kuo, Shin-Jye Lin, Yen-Jen Oyang, Lin-shan Lee, “A VLSI Chip Set for Chinese Speech Recognition”, Custom Integrated Circuits Conference, IEEE, Boston, MA, U.S.A., May 1992.
- IC-65. Cheng-Kun Wang, Lin-shan Lee, Yen-Wen Lu, Wenhsing Chen, Yung-Pin Hsu, “An Improved Approach for Importance Sampling Simulation for Multilevel Digital Transmission Systems”, 1992 International Conference on Communications, IEEE, Chicago, Ill., U.S.A., Jun 1992, pp. 917-921.
- IC-66. Chen-Kun Wang, Lin-shan Lee, “A New Realization of the Whitened Matched Filter Incorporating Easy Symbol Synchronization for High-speed Transmission”, 1992 International Conference on Communications, IEEE, Chicago, Ill., U.S.A., Jun 1992, pp. 922-926.
- IC-67. Chih-Heng Lin & Lin-shan Lee, “Mandarin Syllable Recognition Based on Weighted Hidden Markov Models of Sub-syllabic Units”, International Conference on Spoken Language Processing, Banff, Alberta, Canada, Oct 1992.
- IC-68. Jinn-Ja Chang, Lin-shan Lee, “An Exact Performance Analysis of the Linear Diversity Combining Receiver for FH/MFSK Systems Against Band Multitone Jammer”, IEEE Second International Symposium on Spread Spectrum Techniques and Applications, Yokohama, Japan, Nov 1992, pp. 341-344.
- IC-69. Yumin Lee, Chiu-yu Tseng, Lin-shan Lee, “Isolated Mandarin Syllable Recognition Specially considering the Effect of Tones”, 1992 International Conference on Computer Processing of Chinese

- and Oriental Languages, CLCS, Sand Key, Fl., U.S.A. , Dec 1992, pp. 92 - 99.
- IC-70. Yumin Lee, Lin-shan Lee, “ Continuous Hidden Markov Models Integrating Transitional and Instantaneous Features for Mandarin Syllable Recognition”, 1992 International Conference on Computer Processing of Chinese and Oriental Languages, CLCS, Sand Key, Fl, U.S.A. , Dec 1992, pp. 117 - 122.
- IC-71. Lin-shan Lee, Chiu-yu Tseng, Keh-Jiann Chen, I-Jung Hung, Ming-Yu Lee, Lee-Feng Chien, Yumin Lee, Renyuan Lyu, Hsin-min Wang, Yung-Chuan Wu, Tung-Sheng Lin, Hung-yan Gu, Chi-ping Nee, Chun-Yi Liao, Yeng-Ju Yang, Yuan-Cheng Chang, Rung-chiung Yang, “Golden Mandarin(II) - An Improved Single-Chip Real-Time Mandarin Dictation Machine for Chinese Language with Very Large Vocabulary”, International Conference on Acoustics, Speech and Signal Processing, Apr 1993, Minneapolis, MN, U.S.A., pp. II-503-506.
- IC-72. Chih-Heng Lin, Lin-shan Lee, Pei-Yih Ting, “A New Framework for Recognition of Mandarin Syllables with Tones Using Sub-syllabic Units”, International Conference on Acoustics, Speech and Signal Processing, Minneapolis, MN, U.S.A., Apr 1993, pp. II-227-229.
- IC-73. Cheng-Kun Wang, Lin-shan Lee, “Statistical Analysis and Empirical Approaches for Importance Sampling and Monte Carlo Techniques in Digital Transmission System Simulation”, 1993 International Conference on Communications, Geneva, Switzerland, May 1993, pp. 1942-1946.
- IC-74. Jung-Fu Cheng, Ching-Hua Chuang, Lin-shan Lee, “Complexity-reduced Multilevel Coding with Rate-compatible Punctured Convolutional Codes”, 1993 Global Telecommunications Conference, Houston, TX, U.S.A. , Nov 1993, pp. 814-818.
- IC-75. Lin-shan Lee, Keh-Jiann Chen, Chiu-yu Tseng, Renyuan Lyu, Lee-Feng Chien, Hsin-min Wang, Jia-lin Shen, Sung-Chien Lin, Yen-Ju Yang, Bo-Ren Bai, Chi-Ping Nee, Chun-Yi Liao, Shueh-Sheng Lin, Chung-Shu Yang, I-Jung Hung, Ming-Yu Lee, Rei-Chang Wang, Bo-Shen Lin, Yuan-Cheng Chang, Rung-Chiung Yang, Yung-Chi Huang, Chen-Yuan Lou, Tung-Sheng Lin, “Golden Mandarin(II) - An Intelligent Mandarin Dictation Machine for Chinese Character Input with Adaptation/Learning Functions”, 1994 International Symposium on Speech, Image Processing and Neural Networks, Apr 1994, Hong Kong, pp. 155-159.
- IC-76. Jia-lin Shen, Hsin-min Wang, Bo-Ren Bai, Lin-shan Lee, “An Initial Study on A Segmental Probability Model Approach to Large Vocabulary Continuous Mandarin Speech Recognition”, International Conference on Acoustics, Speech and Signal Processing, Adelaide, Australia, Apr 1994, pp. II-133-136.
- IC-77. Jung-Kuei Chen, Frank K. Soong, Lin-shan Lee, “Large Vocabulary Word Recognition Based on Tree-Trellis Search”, International Conference on Acoustics, Speech and Signal Processing, Adelaide, Australia, Apr 1994, pp. II-137-140.
- IC-78. Renyuan Lyu, Jia-lin Shen, I-Chung Hong, Ming-Yu Lee and Lin-shan Lee, “A New Approach for Mandarin Base-Syllable Recognition Based Upon Segmental Probability Model (SPM)”, International Conference on Computer Processing of Oriental Languages, Taejon, Korea, May 1994, pp. 201-206.
- IC-79. Hsin-min Wang, Yuan-Cheng Chang and Lin-shan Lee, “An Algorithm to Select Phonetically Balanced Sentences from A Corpus for Continuous Speech Recognition”, International Conference on Computer Processing of Oriental Languages, Taejon, Korea, May 1994, pp. 207-210.
- IC-80. Renyuan Lyu, Hsin-min Wang, Shiao-Hong Hwang, Chiu-yu Tseng, Lin-shan Lee, “A Comparison of

- Different Acoustic Units Applied to Isolated/Continuous Large-Vocabulary Mandarin Speech Recognition”, International Conference on Computer Processing of Oriental Languages, Taejon, Korea, May 1994, pp. 211-214.
- IC-81. Jia-lin Shen, Hsin-min Wang, Renyuan Lyu, Lin-shan Lee, “Incremental Speaker Adaptation Using Phonetically Balanced Training Sentences for Mandarin Syllable Recognition Based on Segmental Probability Models”, International Conference on Spoken Language Processing, Yokohama, Japan, Sep 1994, pp. 443-446.
- IC-82. Yen-Ju Yang, Sung-Chien Lin, Lee-Feng Chien, Keh-Jiann Chen, Lin-shan Lee, “An Intelligent and Efficient Word-Class-Based Chinese Language Model for Mandarin Speech Recognition with Very Large Vocabulary”, International Conference on Spoken Language Processing, Yokohama, Japan, Sep 1994, pp. 1371-1374.
- IC-83. Ching-Hua Chuang, Lin-shan Lee, “A Coded Modulation Design with Equal Utilization of Signal Dimensions Using A Simple Convolutional Code”, International Symposium on Information Theory and its Applications, Sydney, Australia, Nov1994, pp. 469-473.
- IC-84. Ching-Hua Chuang, Lin-shan Lee, “An Improved Pragmatic Approach to Coded Modulation Design with Multiple Carrier Frequencies”, Global Telecommunications Conference, San Francisco, CA, U.S.A. , Nov 1994, pp. 1024-1028.
- IC-85. Ren-yuan Lyu, Lee-Feng Chien, Shiao-Hong Hwang, Hung-Yun Hsieh, Rung-Chiuan Yang, Bo-Ren Bai, Jia-Chi Weng, Yen-Ju Yang, Shi-Wei Lin, Keh-Jiann Chen, Chiu-Yu Tseng, Lin-shan Lee, “Golden Mandarin (III)-A User-Adaptive Prosodic-Segment-Based Mandarin Dictation Machine for Chinese Language with Very Large Vocabulary”, International Conference on Acoustics, Speech and Signal Processing, Detroit, U.S.A., May 1995, pp. 57-60.
- IC-86. Hsin-min Wang, Jia-lin Shen, Yen-Ju Yang, Chiu-Yu Tseng, Lin-shan Lee, “Complete Recognition Of Continuous Mandarin Speech for Chinese Language with Very Large Vocabulary But Limited Training Data”, International Conference on Acoustics, Speech and Signal Processing5, Detroit, U.S.A., May 1995, pp. 61-64.
- IC-87. Sung-Chien Lin, Lee-Feng Chien, Keh-Jiann Chen, Lin-shan Lee, “A Syllable-based Very-Large-Vocabulary Voice Retrieval System for Chinese Databases with Textual Attributes”, 4th European Conference on Speech Communication and Technology, ESCA, Madrid, Spain, Sep 1995, pp. 203-206.
- IC-88. Tai-hsuan Ho, Hsin-min Wang, Lee-Feng Chien, Keh-Jiann Chen, Lin-shan Lee, “Fast and Accurate Continuous Speech Recognition for Chinese Language with Very Large Vocabulary”, 4th European Conference on Speech Communication and Technology, ESCA, Madrid, Spain, Sep 1995, pp. 211-214.
- IC-89. Jung-Kuei Chen, Lin-shan Lee, Frank K. Soong, “Large Vocabulary Word-based Mandarin Dictation System”, 4th European Conference on Speech Communication and Technology, ESCA, Madrid, Spain, Sep 1995, pp. 285-288.
- IC-90. Sung-Chien Lin, Lee-Feng Chien, Keh-Jiann Chen and Lin-shan Lee, “Unconstrained Speech Retrieval for Chinese Document Databases with Very Large Vocabulary and Unlimited Domains”, 4th European Conference on Speech Communication and Technology, ESCA, Madrid, Spain, Sep 1995, pp. 1203-1206.

- IC-91. Jia-lin Shen, Lin-shan Lee, “A Chernoff Distance Based Segmental Probability Model (CD-SPM) Approach for Mandarin Syllable Recognition”, 4th European Conference on Speech Communication and Technology, ESCA, Madrid, Spain, Sep 1995, pp. 1491-1494.
- IC-92. Hsin-min Wang, Lin-shan Lee, “A Fast Approximate Algorithm for Parametric Variable Duration HMM's for Speech Recognition”, International Conference on Computer Processing of Oriental Languages, Hawaii, U.S.A., Nov 1995, pp. 4-7.
- IC-93. Yen-Ju Yang, Lee-feng Chien, Lin-shan Lee, “An Efficient Linguistic Decoding System with Adaptive Learning Schemes for Mandarin Speech Recognition Applications”, International Conference on Computer Processing of Oriental Languages, Hawaii, U.S.A., Nov 1995, pp. 8-14.
- IC-94. Tai-hsuan Ho, Lee-feng Chien, Lin-shan Lee, “An Efficient Three-Stage Recognition Approach to Continuous Speech of Chinese Language with Very Large Vocabulary”, International Conference on Computer Processing of Oriental Languages, Hawaii, U. S. A., Nov 1995, pp. 56-60.
- IC-95. Jia-lin Shen, Lin-shan Lee, “A Cepstrum Normalization Approach for Environmental Robustness with Microphone Variations in a Mandarin Speech Recognition Application”, International Conference on Computer Processing of Oriental Languages, Hawaii, U. S. A., Nov 1995, pp. 61-67.
- IC-96. Jia-Lin Shen, Lin-shan Lee, “Fast and Accurate Recognition of Very-Large-Vocabulary Continuous Mandarin Speech for Chinese Language with Improved Segmental Probability Modeling”, 1996 IEEE Int. Conf. on Acoustic, Speech and Signal Processing, Atlanta, Georgia, U.S.A., May 1996, pp. 125-128.
- IC-97. Sung-Chien Lin, Lee-Feng Chien, Keh-Jiann Chen, Lin-shan Lee, “An Efficient Voice Retrieval System for Very-Large-Vocabulary Chinese Textual Databases with a Clustered Language Model”, Proc. 1996 IEEE Int. Conf. on Acoustic, Speech and Signal Processing, Atlanta, Georgia, U.S.A., May 1996, pp. 287-290.
- IC-98. Yen-Ju Yang, Lee-Feng Chien, Lin-shan Lee, “Speaker Intention Modeling for Large Vocabulary Mandarin Spoken Dialogues”, 4th Int. Conf. on Spoken Language Processing, Philadelphia, PA, U.S.A., Oct 1996, pp. 713-716.
- IC-99. Hung-Yen Hsieh, Ren-Yuan Lyu, Lin-shan Lee, “Use of Prosodic Information to Integrate Acoustic and Linguistic Knowledge in Continuous Mandarin Speech Recognition with Very Large Vocabulary”, 4th Int. Conf. on Spoken Language Processing, Philadelphia, PA, U.S.A., Oct 1996, pp. 809-812.
- IC-100. Jia-Lin Shen, Wen-Liang Hwang, Lin-shan Lee, “Robust Speech Recognition Features Based on Temporal Trajectory Filtering of Frequency Band Spectrum”, 4th Int. Conf. on Spoken Language Processing, Philadelphia, PA, U.S.A., Oct 1996, pp. 881-884.
- IC-101. Fu-Chiang Chou, Chiu-Yu Tseng, Lin-shan Lee, “Automatic Generation of Prosodic Structure for High Quality Mandarin Speech Synthesis”, 4th Int. Conf. on Spoken Language Processing, Philadelphia, PA, U.S.A., Oct 1996, pp. 1624-1627.
- IC-102. Bo-Ren Bai, Lee-Feng Chien, Lin-shan Lee, “Very-Large-Vocabulary Mandarin Voice Message File Retrieval Using Speech Queries”, 4th Int. Conf. on Spoken Language Processing, Philadelphia, PA, U.S.A., Oct 1996, pp. 1950-1953.
- IC-103. Bo-Ren Bai, Hsin-Min Wang, Lin-shan Lee, “Log-Likelihood Score Normalization Techniques for Recognition of Chinese Keywords with Large Vocabulary”, 7th International Conference on Computer Processing of Oriental Languages, Hong Kong, Apr 1997, pp. 186-191.

- IC-104. Yen-Ju Yang, Lee-Feng Chien and Lin-shan Lee, “A New Efficient Approach for Collocation Extraction”, 7th International Conference on Computer Processing of Oriental Languages, Hong Kong, Apr 1997, pp. 484-491.
- IC-105. Sung-Chien Lin, Lee-Feng Chien, Keh-Jiann Chen, Lin-shan Lee, “Search Strategies for Voice Retrieval of Chinese Databases Using Clustered Language Models”, 7th International Conference on Computer Processing of Oriental Languages, Hong Kong, Apr 1997, pp. 588-593.
- IC-106. Bo-Ren Bai, Chiu-Yu Tseng, Lin-shan Lee, “A Multi-phase Approach for Fast Spotting of Large Vocabulary Chinese Keywords from Mandarin Speech Using Prosodic Information”, 1997 IEEE Int. Conf. on Acoustics, Speech and Signal Processing, Munich, Germany, Apr 1997, pp. 903-906.
- IC-107. Fu-Chiang Chou, Chiu-Yu Tseng, Keh-Jiann Chen, Lin-shan Lee, “A Chinese Text-to-Speech System Based on Part-of-Speech Analysis, Prosodic Modeling and Non-Uniform Units”, 1997 IEEE Int. Conf. on Acoustics, Speech and Signal Processing, Munich, Germany, Apr 1997, pp. 923-926.
- IC-108. Lee-Feng Chien, Sung-Chien Lin, Jenn-Chau Hong, Ming-Chiuan Chen, Hsin-Min Wang, Jia-Lin Shen, Keh-Jiann Chen, Lin-shan Lee, “Internet Chinese Information Retrieval Using Unconstrained Mandarin Speech Queries Based on A Client-Server Architecture and A PAT-Tree-Based Language Model”, 1997 IEEE Int. Conf. on Acoustics, Speech and Signal Processing, Munich, Germany, Apr 1997, pp. 1155-1158.
- IC-109. Lin-shan Lee, Bo-Ren Bai, Lee-Feng Chien, “Syllable-Based Relevance Feedback Techniques for Mandarin Voice Record Retrieval Using Speech Queries”, 1997 IEEE Int. Conf. on Acoustics, Speech and Signal Processing, Munich, Germany, Apr 1997, pp. 1459-1462.
- IC-110. Jia-Chin Lin, Lin-shan Lee, “A Modified Code Tracking Loop for Direct-Sequence Spread-Spectrum Systems on Frequency-Selective Fading Channels”, 1997 International Conference on Communications, Montrael, Canada, Jun 1997.
- IC-111. Sung-Chien Lin, Chi-Lung Tsai, Lee-Feng Chien, Keh-Jiann Chen, Lin-shan Lee, “Chinese Language Model Adaptation Based on Document Classification and Multiple Domain-Specific Language Models”, 5th European Conference on Speech Communication and Technology, Rhode, Greece, Sep 1997, pp. 1463-1466.
- IC-112. Sung-Chien Lin, Lee-Feng Chien, Ming-Chiuan Chen, Lin-shan Lee, Keh-Jiann Chen, “Intelligent Retrieval of Very Large Chinese Dictionaries with Speech Queries”, 5th European Conference on Speech Communication and Technology, Rhode, Greece, Sep 1997, pp. 1767-1770.
- IC-113. Kai-Cherng Yang, Tai-Hsuan Ho, Lee-Feng Chien, Lin-shan Lee, “Statistics-Based Segment Pattern Lexicon – A New Direction for Chinese Language Modeling”, 1998 International Conference on Acoustics, Speech and Signal Processing, Seattle, WA, U.S.A., May 1998, pp. I-169-I-172.
- IC-114. Jeih-weih Hung, Jia-lin Shen, Lin-shan Lee, “Improved Robustness for Speech Recognition Under Noisy Conditions Using Correlated Parallel Model Combination”, 1998 International Conference on Acoustics, Speech and Signal Processing, Seattle, WA, U.S.A., May 1998, pp. I-553-I-556.
- IC-115. Tai-Hsuan Ho, Kai-Cherng Yang, Kuo-Hsun Huang, Lin-shan Lee, “Improved Search Strategy for Large Vocabulary Continuous Mandarin Speech Recognition”, 1998 International Conference on Acoustics, Speech and Signal Processing, Seattle, WA, U.S.A., May 1998, pp. II-825-II-828.
- IC-116. Lee-Feng Chien, Min-Jer Lee, Hsiao-Tieh Pu, Lin-shan Lee, “Recent Results on Internet-Based Chinese Text Corpus Classification Using Automatically Extracted Keywords”, First International

- Workshop on East-Asian Language Resources and Evaluation, Tsukuba, Japan, May 1998, pp. 139-143.
- IC-117. Jia-Chin Lin, Lin-shan Lee, “A Modified Blind Equalization Technique Based on A Constant Modulus Algorithm”, International Conference on Communications, Atlanta, GE, U.S.A., Jun 1998, paper S10.5.
- IC-118. Lin-shan Lee, “Spoken Language Processing for Mandarin Chinese – Present and Future”, invited paper, 1998 Symposium on Image, Speech, Signal Processing and Robotics, Hong Kong, Sep 1998, pp. II-229-II-234.
- IC-119. Lin-shan Lee, “Intelligence and Adaptation for Speech Recognition under Network Environment”, keynote speech, 1998 IEEE Workshop on Intelligent Signal Processing and Communication Systems, Nov 1998, pp. 502-516.
- IC-120. Jia-Chin Lin, Lin-shan Lee, “A Noncoherent Sequential PN Code Acquisition Scheme in DS/SS Receivers”, 1998 Global Telecommunications Conference, Sydney, Australia, Nov 1998, pp. S80.7.
- IC-121. Berlin Chen, Hsin-Min Wang, Lee-Feng Chien, Lin-shan Lee, “A*-Admissible Key-Phrase Spotting with Sub-Syllable Level Utterance Verification”, 1998 International Conference on Spoken Language Processing, Sydney, Australia, Nov 1998.
- IC-122. Jia-Lin Shen, Jieh-Weih Hung, Lin-shan Lee, “Robust Entropy-Based Endpoint Detection for Speech Recognition in Noisy Environments”, 1998 International Conference on Spoken Language Processing, Sydney, Australia, Nov 1998.
- IC-123. Yen-Ju Yang, Lin-shan Lee, “A Syllable-Based Chinese Spoken Dialogue System for Telephone Directory Services Primarily Trained with A Corpus”, 1998 International Conference on Spoken Language Processing, Sydney, Australia, Nov 1998.
- IC-124. Fu-Chiang Chou, Chiu-Yu Tseng, Lin-shan Lee, “Automatic Segmental and Prosodic Labeling of Mandarin Speech Database”, 1998 International Conference on Spoken Language Processing, Sydney, Australia, Nov 1998.
- IC-125. Jieh-Weih Hung, Jia-Lin Shen, Lin-shan Lee, “Improved Parallel Model Combination Based on Better Domain Transformation for Speech Recognition Under Noisy Enviornments”, 1998 International Conference on Spoken Language Processing, Sydney, Australia, Nov 1998.
- IC-126. Jia-Lin Shen, Jieh-Weih Hung, Lin-shan Lee, “Improved Robust Speech Recognition Considering Signal Correlation Approximated by Taylor Series”, 1998 International Conference on Spoken Language Processing, Sydney, Australia, Nov 1998.
- IC-127. Bor-Shen Lin, Berlin-Chen, Hsin-Min Wang, Lin-shan Lee, “Hierarchical Tag-Graph Search for Spontaneous Speech Understanding in Spoken Dialog Systems”, 1998 International Conference on Spoken Language Processing, Sydney, Australia, Nov 1998.
- IC-128. Lin-shan Lee, “Structural Features of Chinese Language – Why Chinese Spoken Language Processing is Special and Where We Are”, keynote Speech, 1998 International Symposium on Chinese Spoken Language Processing, Singapore, Dec 1998, pp. 1-15.
- IC-129. Chun-Liang Chen, Bo-Ren Bai, Lee-Feng Chien, Lin-shan Lee, “PAT-Tree-Based Language Modeling with Initial Application of Chinese Speech Recognition Output Verification”, 1998 International Symposium on Chinese Spoken Language Processing, Singapore, Dec 1998, pp. 139-144.
- IC-130. Po-yu Liang, Jia-lin Shen, Lin-shan Lee, “Decision Tree Clustering for Acoustic Modeling in

- Speaker-Independent Mandarin Telephone Speech Recognition”, 1998 International Symposium on Chinese Spoken Language Processing, Singapore, Dec 1998, pp. 207-211.
- IC-131. Bo-Ren Bai, Berlin Chen, Hsin-Min Wang, Lee-Feng Chien, Lin-shan Lee, “Large-Vocabulary Chinese Text/Speech Information Retrieval Using Mandarin Speech Queries”, 1998 International Symposium on Chinese Spoken Language Processing, Singapore, Dec 1998, pp. 284-289.
- IC-132. Jieh-Wei Hung, Jia-Lin Shen, Lin-shan Lee, “Improved Parallel Model Combination Techniques with Split Gaussian Mixtures for Speech Recognition Under Noisy Conditions”, 1999 International Conference on Acoustics, Speech and Signal Processing, Phoenix, AZ, U.S.A., Mar 1999, pp. 437-440.
- IC-133. Bor-Shen Lin, Lin-shan Lee, “A Framework of Performance Evaluation and Error Analysis Methodology for Speech Understanding Systems”, 1999 International Conference on Acoustics, Speech and Signal Processing, Phoenix, AZ, U.S.A., Mar 1999, pp. 637-640.
- IC-134. Lee-Feng Chien, Keh-Jiann Chen, Lin-shan Lee, “Construction of Chinese Spoken Language Corpora Towards A Network Era – Long-term Directions and Current Status”, Second International Workshop on East-Asian Language Resources and Evaluation, Taipei, Taiwan, Republic of China, May 1999, pp. 81-84.
- IC-135. Lin-shan Lee, Lee-feng Chien and Keh-Jiann Chen, “Preliminary Tools and Systems with Initial Experiences for Chinese Spoken Language Processing Tasks”, ESCA Tutorial and Research Workshop on Interactive Dialogue in Multi-modal Systems, Kloster Irsee, Germany, Jun 1999.
- IC-136. Tai-Hsuan Ho, Chin-Jung Liu, Herman Sun, Ming-Yi Tsai, Lin-shan Lee, “Phonetic State Tied-Mixture Tone Modeling for Large Vocabulary Continuous Mandarin Speech Recognition”, Sixth European Conference on Speech Communication and Technology, Budapest, Hungary, Sep 1999, pp. 883-886.
- IC-137. Bor-Shen Lin, Hsin-min Wang, Lin-shan Lee, “Consistent Dialogue across Concurrent Topics Based on An Expert System Model”, Sixth European Conference on Speech Communication and Technology, Budapest, Hungary, Sep 1999, pp. 1427-1430.
- IC-138. Fu-Chiang Chou, Chiu-Yu Tseng, Lin-shan Lee, “Selection of Waveform Units for Corpus-based Mandarin Speech Synthesis Based on Decision Trees and Prosodic Modification Costs”, Sixth European Conference on Speech Communication and Technology, Budapest, Hungary, Sep 1999, pp. 2295-2298.
- IC-139. Bor-shen Lin, Hsin-ming Wang, Lin-shan Lee, “A Distributed Architecture for Cooperative Spoken Dialogue Agents with Coherent Dialogue State and History”, IEEE Automatic Speech Recognition and Understanding Workshop, Keystone, Colorado, U.S.A., Dec 1999.
- IC-140. Lin-shan Lee, “Programs and Activities on Chinese Spoken Language Processing”, IEEE Automatic Speech Recognition and Understanding Workshop, Keystone, Colorado, U.S.A., Dec 1999.
- IC-141. Lin-shan Lee, Lee-Feng Chien, “Live Lexicons and Dynamic Corpora Adapted to the Network Resources for Chinese Spoken Language Processing Applications in an Internet Era”, 2nd International Conference on Language Resources and Evaluation, Athens, Greece, May 2000, pp. 931-936.
- IC-142. Berlin Chen, Hsin-min Wang, Lin-shan Lee, “Retrieval of Broadcast News Speech in Mandarin Chinese Collected in Taiwan Using Syllable-level Statistical Characteristics”, IEEE International

- Conference on Acoustics, Speech and Signal Processing, Istanbul, Turkey, Jun 2000, SP-P9.14, pp. III-1771-1774.
- IC-143. Bor-shen Lin, Lin-shan Lee, “Fundamental Performance Analysis for Spoken Dialogue Systems Based on A Quantitative Simulation Approach”, IEEE International Conference on Acoustics, Speech and Signal Processing, Istanbul, Turkey, Jun 2000, SP-L9.2, pp. II-1221-1224.
- IC-144. Bor-shen Lin, Lin-shan Lee, “Computer-Aided Design/Analysis for Chinese Spoken Dialogue System”, International Symposium on Chinese Spoken Language Processing, Oct 2000, Beijing, China, pp. 57-60.
- IC-145. Lin-shan Lee, Lee-Feng Chien, Yumin Lee, “Global Information Access by Chinese Spoken Language in A Wireless Era - Overview with Some Recent Results”, International Symposium on Chinese Spoken Language Processing, Oct 2000, Beijing, China, pp. 363-366.
- IC-146. Berlin Chen, Hsin-ming Wang, Lin-shan Lee, “Retrieval of Mandarin Broadcast News Using Spoken Queries”, International Conference on Spoken Language Processing, Oct 2000, Beijing, China, pp. I-520-523.
- IC-147. Kuan-ting Chen, Wen-wei Liao, Hsin-ming Wang, Lin-shan Lee, “Fast Speaker Adaptation Using Eigenspace-based Maximum Likelihood Linear Regression”, International Conference on Spoken Language Processing, Oct 2000, Beijing, China, pp. III-742-745.
- IC-148. Jeh-weih Hung, Hsin-ming Wang, Lin-shan Lee, “Automatic Metric-based Speech Segmentation for Broadcast News via Principal Component Analysis”, International Conference on Spoken Language Processing, Oct 2000, Beijing, China, pp. IV-121-124.
- IC-149. Hsiao-Chuan Wang, Frank Seide, Chiu-yu Tseng, Lin-shan Lee, “MAT-2000: Design, Collection, and Validation of a Mandarin 2000-Speaker Telephone Speech Database”, 6th International Conference on Spoken Language Processing, Oct 2000, Beijing, China, pp. IV- 460-463.
- IC-150. Nick J.-C. Wang, Shang-Ming Lee, Frank Seide, Lin-shan Lee, “Rapid Speaker Adaptation Using A Priori Knowledge by Eigenspace Analysis of MLLR Parameters”, International Conference on Acoustics, Speech and Signal Processing, Salt Lake City, Utah, U.S.A., May 2001.
- IC-151. Bor-shen Lin, Lin-shan Lee, “Early Stage Evaluation of Spoken Dialogue System Performance Based on Quantitative Simulations”, Oriental COCOSDA Workshop, Taejon, Korea, Aug 2001, pp. 97-106.
- IC-152. Berlin Chen, Hsin-min Wang, Lin-shan Lee, “Improved Spoken Document Retrieval by Exploring Extra Acoustic and Linguistic Cues”, 2001 European Conference on Speech Communication and Technology, Aalborg, Denmark, Sep 2001.
- IC-153. Berlin Chen, Hsin-min Wang, Lin-shan Lee, “An HMM/N-gram-based Linguistic Processing Approach for Mandarin Spoken Document Retrieval”, European Conference on Speech Communication and Technology, Aalborg, Denmark, Sep 2001.
- IC-154. Yu-Tsao, Shang-Ming Lee, Fu-Chiang Chou, Lin-shan Lee, “Segmental Eigenvoice for Rapid Speaker Adaptation”, 2001 European Conference on Speech Communication and Technology, Aalborg, Denmark, Sep 2001.
- IC-155. Nick J.-C. Wang, Wei-Ho Tsai, Lin-shan Lee, “Eigen-MLLR Coefficients as New Feature Parameters for Speaker Identification”, 2001 European Conference on Speech Communication and Technology, Aalborg, Denmark, Sep 2001.
- IC-156. Ming-yi Tsai, Fu-Chiang Chou, Lin-shan Lee, “Pronunciation Variation Analysis with respect to

- Various Linguistic Levels and Contextual Conditions for Mandarin Chinese”, 2001 European Conference on Speech Communication and Technology, Aalborg, Denmark, Sep 2001.
- IC-157. Yiou-Wen Cheng, Lin-shan Lee, “Credibility Proof for Speech Content and Speaker Verification by Fragile Watermarking with Consecutive Frame-based Processing”, 2001 European Conference on Speech Communication and Technology, Aalborg, Denmark, Sep 2001.
- IC-158. Jieh-weih Hung, Hsin-min Wang, Lin-shan Lee, “Comparative Analysis for Data-driven Temporal Filters Obtained via Principal Component Analysis (PCA) and Linear Discriminant Analysis (LDA) in Speech Recognition”, 2001 European Conference on Speech Communication and Technology, Aalborg, Denmark, Sep 2001.
- IC-159. Ming-yi Tsai, Fu-chiang Chou, Lin-shan Lee, “Improved Pronunciation Modeling by Inverse Word Frequency and Pronunciation Entropy”, IEEE Automatic Speech Recognition and Understanding Workshop, Madonna di Campiglio, Italy, Dec 2001.
- IC-160. Shang-Ming Lee, Shi-Hau Fang, Jieh-weih Hung, Lin-shan Lee, “Improved MFCC Feature Extraction by PCA-Optimized Filter-bank for Speech Recognition”, IEEE Automatic Speech Recognition and Understanding Workshop, Madonna di Campiglio, Italy, Dec 2001.
- IC-161. Jieh-weih Hung, Lin-shan Lee, “Data-driven Temporal Filters for Robust Features in Speech Recognition Obtained via Minimum Classification Error (MCE)”, IEEE International Conference on Acoustics, Speech and Signal Processing, Orlando, FL, U.S.A., May 2002.
- IC-162. Cheng-Huang Wu, Yumin Lee, Lin-shan Lee, “Distributed Mandarin Speech Recognition under Wireless Environment”, International Symposium on Chinese Spoken Language Processing, Taipei, Taiwan, Republic of China, Aug 2002.
- IC-163. Chun-Jen Wang, Berlin Chen, Lin-shan Lee, “A Data-driven Indexing Approach for Chinese Spoken Document Retrieval”, International Symposium on Chinese Spoken Language Processing, Taipei, Taiwan, Republic of China, Aug 2002.
- IC-164. Ming-yi Tsai, Fu-chiang Chou, Lin-shan Lee, “Improved Pronunciation Modeling by Properly Integrating Better Approaches for Baseform Generation, Ranking and Pruning”, ISCA Pronunciation Modeling and Lexicon Adaptation Workshop, Denver, Co, U.S.A., Sep 2002.
- IC-165. Jieh-weih Hung, Lin-shan Lee, “Data-driven Temporal Filters Obtained via Different Optimization Criteria Evaluated on Aurora 2 Database”, International Conference on Spoken Language Processing, Denver, Co, U.S.A., Sep 2002.
- IC-166. Yun-Tien Lee, Cheng-Huang Wu, Yumin Lee, Lin-shan Lee, “Distributed Chinese Keyword Spotting and Verification for Spoken Dialogues under Wireless Environment”, International Conference on Spoken Language Processing, Denver, Co, U.S.A., Sep 2002.
- IC-167. Gwo-hwa Ju, Lin-shan Lee, “Speech Enhancement Based on Generalized Singular Value Decomposition Approach”, International Conference on Spoken Language Processing, Denver, Co, U.S.A., Sep 2002.
- IC-168. Chun-Jen Wang, Berlin Chen, Lin-shan Lee, “Improved Chinese Spoken Document Retrieval with Hybrid Modeling and Data-driven Indexing Features”, International Conference on Spoken Language Processing, Denver, Co, U.S.A., Sep 2002.
- IC-169. Ni-chun Wang, Jieh-weih Hung, Lin-shan Lee, “Data-driven Temporal Filters Based on Multi-Eigenvectors for Robust Features in Speech Recognition”, International Conference on

Acoustics, Speech and Signal Processing, Hong Kong, Apr 2003, pp. 400-403.

- IC-170. Lin-shan Lee, Yuan Ho, Jia-fu Chen, Shun-Chuan Chen, “Why Is the Special Structure of the Language Important for Chinese Spoken Language Processing- Examples on Spoken Document Retrieval, Segmentation and Summarization”, 8th European Conference on Speech Communication and Technology, ISCA, Geneva, Switzerland, Aug 2003, pp. 49-52.
- IC-171. Pi-Chuan Chang, Shuo-Peng Liao, Lin-shan Lee, “Improved Chinese Broadcast News Transcription by Language Modeling with Temporally Consistent Training Corpora and Iterative Phrase Extraction”, 8th European Conference on Speech Communication and Technology, ISCA, Geneva, Switzerland, Aug 2003, pp. 421-424.
- IC-172. Gwo-hwa Ju, Lin-shan Lee, “Perceptually-Constrained Generalized Singular Value Decomposition-Based Approach for Enhancing Speech Corrupted by Colored Noise”, 8th European Conference on Speech Communication and Technology, ISCA, Geneva, Switzerland, Aug 2003, pp. 533-536.
- IC-173. Gwo-hwa Ju, Lin-shan Lee, “Speech Enhancement and Improved Recognition Accuracy by Integrating Wavelet Transform and Spectral Subtraction Algorithm”, 8th European Conference on Speech Communication and Technology, ISCA, Geneva, Switzerland, Aug 2003, pp. 1377-1380.
- IC-174. Lin-shan Lee, Shun-Chuan Chen, “Automatic Title Generation for Chinese Spoken Documents Considering the Special Structure of the Language”, 8th European Conference on Speech Communication and Technology, ISCA, Geneva, Switzerland, Aug 2003, pp. 2325-2328.
- IC-175. Shun-Chuan Chen, Lin-shan Lee, “Automatic Title Generation for Chinese Spoken Documents Using an Adaptive K Nearest-Neighbor Approach”, 8th European Conference on Speech Communication and Technology, ISCA, Geneva, Switzerland, Aug 2003, pp. 2813-2816.
- IC-176. Yun-Tien Lee, Shun-Chuan Chen, Lin-shan Lee, “Cross Domain Chinese Speech Understanding and Answering Based on Named-Entity Extraction”, 8th European Conference on Speech Communication and Technology, ISCA, Geneva, Switzerland, Aug 2003, pp. 2821-2824.
- IC-177. Ming-Yi Tsai, Lin-shan Lee, “Pronunciation Variation Analysis Based on Acoustic and Phonemic Distance Measures with Application Examples on Mandarin Chinese”, IEEE 8th Automatic Speech Recognition and Understanding Workshop, St. Thomas, US Virgin Islands, U.S.A., Dec 2003, pp. 117-122.
- IC-178. Wan-yi Lin, Lin-shan Lee, “Improved Tone Recognition for Fluent Mandarin Speech Based on New Inter-Syllabic Features and Robust Pitch Extraction”, IEEE 8th Automatic Speech Recognition and Understanding Workshop, St. Thomas, US Virgin Islands, U.S.A., Dec 2003, pp. 237-242.
- IC-179. Shang-nien Tsai, Lin-shan Lee, “Improved Robust Features for Speech Recognition by Integrating Time-Frequency Principal Components (TFPC) and Histogram Equalization(HEQ)”, IEEE 8th Automatic Speech Recognition and Understanding Workshop, St. Thomas, US Virgin Islands, U.S.A., Dec 2003, pp. 297-302.
- IC-180. Pi-Chuan Chang, Lin-shan Lee, “Improved Language Model Adaptation Using Existing and Derived External Resources”, IEEE 8th Automatic Speech Recognition and Understanding Workshop, St. Thomas, US Virgin Islands, U.S.A., Dec 2003, pp. 531-536.
- IC-181. Lin-shan Lee, “Chinese Spoken Document Understanding and Organization for Indexing/ Browsing and Retrieval Applications”, 18th International Congress on Acoustics, Kyoto, Japan, Apr 2004.

- IC-182. Wei-hao Hsu, Lin-shan Lee, “Efficient and Reliable Distributed Speech Recognition(DSR) over Wireless Fading Channels: 2D-DCT Compression, Iterative Bit Allocation, Short BCH Code and Interleaving”, International Conference on Acoustics, Speech and Signal Processing, Montreal, CA, May 2004, pp. 69-72.
- IC-183. Chang-wen Hsu, Lin-shan Lee, “Higher Order Cepstral Moment Normalization(HOCMN) for Robust Speech Recognition”, International Conference on Acoustics, Speech and Signal Processing, Montreal, CA, May 2004, pp. 197-200.
- IC-184. Shang-nien Tsai, Lin-shan Lee, “A New Feature Extraction Front-end for Robust Speech Recognition using Progressive Histogram Equalization and Multi-Eigenvector Temporal Filtering”, 8th International Conference on Spoken Language Processing, Jeju Island, Korea, Oct 2004, pp. 626-629.
- IC-185. Yi-Cheng Pan, Chia-Hsing Yu, Lin-shan Lee, “Large Vocabulary Continuous Mandarin Speech Recognition Using Finite State Machine”, International Symposium on Chinese Spoken Language Processing, Hong Kong, Dec 2004, pp. 5-8.
- IC-186. Yi Chen, Lin-shan Lee, “Robust Features for Speech Recognition Using Minimum Variance Distortionless Response (MVDR) Spectrum Estimation and Feature Normalization Techniques”, International Symposium on Chinese Spoken Language Processing, Hong Kong, Dec 2004, pp. 101-104.
- IC-187. Lin-shan Lee, Shun-Chuan Chen, Yuan Ho, Jia-Fu Chen, Ming-Han Li, Te-hsuan Li, “An Initial Prototype System for Chinese Spoken Document Understanding and Organization for Indexing/Browsing and Retrieval Applications”, International Symposium on Chinese Spoken Language Processing, Hong Kong, Dec 2004, pp. 329-332.
- IC-188. Yi Chen, Lin-shan Lee, “Energy-Based Frame Selection for Reliable Feature Normalization and Transformation in Robust Speech Recognition”, European Conference on Speech Communication and Technology, Lisbon, Sep 2005, pp. 385-388.
- IC-189. Te-Hsuan Li, Ming-Han Lee, Berlin Chen, Lin-shan Lee, “Hierarchical Topic Organization and Visual Presentation of Spoken Documents Using Probabilistic Latent Semantic Analysis (PLSA) for Efficient Retrieval/Browsing Applications”, European Conference on Speech Communication and Technology, Lisbon, Sep 2005, pp. 625-628.
- IC-190. Chia-yu Wan, Lin-shan Lee, “Histogram-Based Quantization (HQ) for Robust and Scalable Distributed Speech Recognition,” European Conference on Speech Communication and Technology, Lisbon, Sep 2005, pp. 957-960.
- IC-191. Che-Kuang Lin, Lin-shan Lee, “Improved Spontaneous Mandarin Speech Recognition by Disfluency Interruption Point (IP) Detection Using Prosodic Features”, European Conference on Speech Communication and Technology, Lisbon, Sep 2005, pp. 1621-1624.
- IC-192. Che-Kuang Lin, Shu-Chung Tseng, Lin-shan Lee, “Important and New Features with Analysis for Disfluency Interruption Point (IP) Detection in Spontaneous Mandarin Speech”, ISCA Tutorial and Research Workshop on Disfluency in Spontaneous Speech, Aix-en-Provence, Sep 2005, pp. 117-121.
- IC-193. Yi-Cheng Pan, Yu-Ying Liu, Lin-shan Lee, “Named Entity Recognition From Spoken Documents Using Global Evidences and External Knowledge Sources with Applications on Mandarin Chinese”, IEEE Automatic Speech Recognition and Understanding Workshop, San Juan, Nov 2005.
- IC-194. Yi-Cheng Pan, Chien-Chih Wang, Ya-Chao Hsieh, Te-Hsuan Lee, Yen-shin Lee, Yi-Sheng Fu,

- Yu-Tsun Huang, Lin-shan Lee, “A Multi-Modal Dialogue System for Information Navigation and Retrieval across Spoken Document Archives with Topic Hierarchies”, Proceedings of IEEE Automatic Speech Recognition and Understanding Workshop, San Juan, Nov 2005.
- IC-195. Jui-Ting Huang, Lin-shan Lee, “Improved Large Vocabulary Mandarin Speech Recognition Using Prosodic Features”, Speech Prosody 2006, Dresden, Germany, May 2006.
- IC-196. Yi Chen, Chia-yu Wan, Lin-shan Lee, “Entropy-based Feature Parameter Weighting for Robust Speech Recognition”, International Conference on Acoustics, Speech and Signal Processing, Toulouse, France, May 2006.
- IC-197. Chia-yu Wan, Lin-shan Lee, “Joint Uncertainty Decoding (JUD) with Histogram-Based Quantization (HQ) for Robust and/or Distributed Speech Recognition”, International Conference on Acoustics, Speech and Signal Processing, Toulouse, France, May 2006.
- IC-198. Sheng-Yi Kong, Lin-shan Lee, “Improved Spoken Document Summarization Using Probabilistic Latent Semantic Analysis (PLSA)”, International Conference on Acoustics, Speech and Signal Processing, Toulouse, France, May 2006.
- IC-199. Ya-chao Hsieh, Yu-tsun Huang, Chien-chih Wang, Lin-shan Lee, “Improved Spoken Document Retrieval with Dynamic Key Term Lexicon and Probabilistic Latent Semantic Analysis (PLSA)”, International Conference on Acoustics, Speech and Signal Processing, Toulouse, France, May 2006.
- IC-200. Chang-wen Hsu, Lin-shan Lee, “Extension and Further Analysis of Higher Order Cepstral Moment Normalization (HOCMN) for Robust Features in Speech Recognition”, International Conference on Spoken Language Processing, Pittsburgh, U.S.A., Sep 2006.
- IC-201. Yi-cheng Pan, Jia-yu Chen, Yen-shin Lee, Yi-sheng Fu, Lin-shan Lee, “Efficient Interactive Retrieval of Spoken Documents with Key Terms Ranked by Reinforcement Learning”, International Conference on Spoken Language Processing, Pittsburgh, U.S.A., Sep 2006.
- IC-202. I-Fan Chen, Lin-shan Lee, “A New Framework for System Combination Based on Integrated Hypothesis Space”, International Conference on Spoken Language Processing, Pittsburgh, U.S.A., Sep 2006.
- IC-203. Jui-Ting Huang, Lin-shan Lee, “Prosodic Modeling in Large Vocabulary Mandarin Speech Recognition”, International Conference on Spoken Language Processing, Pittsburgh, U.S.A., Sep 2006.
- IC-204. Lin-shan Lee, Sheng-Yi Kong, Yi-Cheng Pan, Yi-Sheng Fu, Yu-Tsun Huang, “Multi-layered Summarization of Spoken Document Archive by Information Extraction and Semantic Structuring”, International Conference on Spoken Language Processing, Pittsburgh, U.S.A., Sep 2006.
- IC-205. Yi-Hao Kao, Lin-shan Lee, “Feature Analysis for Emotion Recognition from Mandarin Speech Considering the Special Characteristics of Chinese Language”, International Conference on Spoken Language Processing, Pittsburgh, U.S.A., Sep 2006.
- IC-206. Che-Kuang Lin, Lin-shan Lee, “Latent Prosodic Modeling (LPM) for Speech with Applications in Recognizing Spontaneous Mandarin Speech with Disfluencies”, International Conference on Spoken Language Processing, Pittsburgh, U.S.A., Sep 2006.
- IC-207. Chang-wen Hsu, Lin-shan Lee, “Powered Cepstral Normalization (P-CN) for Robust Features in Speech Recognition”, International Conference on Spoken Language Processing, Pittsburgh, U.S.A., Sep 2006.

- IC-208. Sheng-Yi Kong, Lin-shan Lee, “Improved Summarization of Chinese Spoken Documents by Probabilistic Latent Semantic Analysis (PLSA) with Further Analysis and Integrated Scoring”, International Workshop on Spoken Language Technology, Aruba, Dec 2006.
- IC-209. Yi-Cheng Pan, Lin-shan Lee, “Simulation Analysis for Interactive Retrieval of Spoken Documents with Key Terms Ranked by Reinforcement Learning, ” International Workshop on Spoken Language Technology, Aruba, Dec 2006.
- IC-210. Che-Kuang Lin, Lin-shan Lee, “Pronunciation Modeling for Spontaneous Speech Recognition Using Latent Pronunciation Analysis (LPA) and Prior Knowledge”, International Conference on Acoustics, Speech, and Signal Processing, Hawaii, U.S.A., Apr 2007, pp. 673-676.
- IC-211. Chia-Yu Wan, Yi Chen, Lin-shan Lee, “Three-Stage Error Concealment for Distributed Speech Recognition (DSR) with Histogram-Based Quantization (HQ) under Noisy Environment”, International Conference on Acoustics, Speech, and Signal Processing, Hawaii, U.S.A., Apr 2007, pp. 877-880.
- IC-212. Yi-Cheng Pan, Hung-Lin Chang, Berlin Chen, Lin-shan Lee, “Subword-Based Position Specific Posterior Lattices (S-PSPL) for Indexing Speech Information”, Interspeech, Antwerp, Belgium, Aug 2007, pp. 318-321.
- IC-213. Yi-Cheng Pan, Lin-shan Lee, “Lexicon Adaptation with Reduced Character Error (LARCE) — A New Direction in Chinese Language Modeling”, Interspeech, Antwerp, Belgium, Aug 2007, pp. 610-613.
- IC-214. Chang-wen Hsu, Lin-shan Lee, “Extended Powered Cepstral Normalization (P-CN) with Range Equalization for Robust Features in Speech Recognition”, Interspeech, Antwerp, Belgium, Aug 2007, pp. 1106-1109.
- IC-215. Aaron Heidel, Hung-An Chang, Lin-shan Lee, “Language Model Adaptation Using Latent Dirichlet Allocation and an Efficient Topic Inference Algorithm”, Interspeech, Antwerp, Belgium, Aug 2007, pp. 2361-2364.
- IC-216. Aaron Heidel, Lin-shan Lee, “Robust Topic Inference for Latent Semantic Language Model Adaptation”, IEEE Automatic Speech Recognition and Understanding Workshop, Kyoto, Japan, Dec 2007.
- IC-217. Liang-Che Sun, Chang-wen Hsu, Lin-shan Lee, “Modulation Spectrum Equalization for Robust Speech Recognition”, IEEE Automatic Speech Recognition and Understanding Workshop, Kyoto, Japan, Dec 2007.
- IC-218. Yi-Cheng Pan, Lin-shan Lee, “Type-II Dialogue Systems for Information Access from Unstructured Knowledge Sources”, IEEE Automatic Speech Recognition and Understanding Workshop, Kyoto, Japan, Dec 2007.
- IC-219. Yi-Cheng Pan, Hun-Lin Chang, Lin-shan Lee, “Analytical Comparison between Position Specific Posterior Lattices and Confusion Networks Based on Words and Subword Units for Spoken Document Indexing”, IEEE Automatic Speech Recognition and Understanding Workshop, Kyoto, Japan, Dec 2007.
- IC-220. Yi Chen, Chia-yu Wan, Lin-shan Lee, “Robust Speech Recognition by Properly Utilizing Reliable Frames and Segments in Corrupted Signals”, IEEE Automatic Speech Recognition and Understanding Workshop, Kyoto, Japan, Dec 2007.
- IC-221. Chia-Yu Wan, Yi Chen, Lin-shan Lee, “Context Dependent Quantization for Distributed and/or Robust

- Speech Recognition”, International Conference on Acoustics, Speech and Signal Processing, Las Vegas, Nevada, U.S.A., Mar 2008, pp. 4413-4416.
- IC-222. Liang-Che Sun, Chang-wen Hsu, Lin-shan Lee, “Evaluation of Modulation Spectrum Equalization Techniques for Large Vocabulary Robust Speech Recognition”, Interspeech, Brisbane, Australia, Sep 2008, pp. 1004-1007.
- IC-223. Yi Chen, Chia-Yu Wan, Lin-shan Lee, “Confusion-Based Entropy-Weighted Decoding for Robust Speech Recognition”, Interspeech, Brisbane, Australia, Sep 2008, pp. 1008-1011.
- IC-224. Li-Wei Cheng, Lin-shan Lee, “Improved Large Vocabulary Mandarin Speech Recognition by Selectively Using Tone Information with a Two-stage Prosodic Model”, Interspeech, Brisbane, Australia, Sep 2008, pp. 1137-1140.
- IC-225. Shuo-Yiin Chang, Lin-shan Lee, “Data-driven Clustered Hierarchical Tandem System for LVCSR”, Interspeech, Brisbane, Australia, Sep 2008, pp. 2250-2253.
- IC-226. Sheng-Yi Kong, Chien-Chi Wang, Ko-Chien Kuo, Lin-shan Lee, “Automatic Title Generation for Spoken Documents with a Delicate Scored Viterbi Algorithm”, 2nd IEEE Workshop on Spoken Language Technology, Goa, India, Dec 2008, pp. 165-168.
- IC-227. Hung-Lin Chang, Yi-Cheng Pan, Lin-shan Lee, “Latent Semantic Retrieval of Spoken Documents over Position Specific Posterior Lattices”, 2nd IEEE Workshop on Spoken Language Technology, Goa, India, Dec 2008, pp. 285-288.
- IC-228. Yi-Cheng Pan, Lin-shan Lee, “Robustness Analysis on Lattice-based Speech Indexing Approaches with Respect to Varying Recognition Accuracies by Refined Simulations”, 2nd IEEE Workshop on Spoken Language Technology, Goa, India, Dec 2008, pp. 289-292.
- IC-229. Yung-Jen Cheng, Che-Kuang Lin, Lin-shan Lee, “Evaluation and Analysis of Minimum Phone Error Training and its Modified Versions for Large Vocabulary Mandarin Speech Recognition”, 6th International Symposium on Chinese Spoken Language Processing, Kunming, China, Dec 2008, pp. 1-4.
- IC-230. Yi-Sheng Fu, Chia-Yu Wan, Lin-shan Lee, “Latent Semantic Retrieval of Personal Photos with Sparse User Annotation by Fused Image/Speech/Text Features”, International Conference on Acoustics, Speech and Signal Processing, Taipei, Taiwan, Republic of China, Apr 2009, pp. 1969-1972.
- IC-231. Shuo-Yiin Chang, Lin-shan Lee, “Improved Clustered Hierarchical Tandem System with Bottom-Up Processing”, International Conference on Acoustics, Speech and Signal Processing, Taipei, Taiwan, Republic of China, Apr 2009, pp. 4441-4444.
- IC-232. Sheng-Yi Kong, Miao-Ru Wu, Che-Kuang Lin, Yi-Sheng Fu, Lin-shan Lee, “Learning on Demand-Course Lecture Distillation by Information Extraction and Semantic Structuring for Spoken Documents”, International Conference on Acoustics, Speech and Signal Processing, Taipei, Taiwan, Republic of China, Apr 2009, pp. 4709-4712.
- IC-233. Chao-Hong Meng, Hung-yi Lee, Lin-shan Lee, “Improved Lattice-Based Spoken Document Retrieval by Directly Learning from the Evaluation Measures”, International Conference on Acoustics, Speech and Signal Processing, Taipei, Taiwan, Republic of China, Apr 2009, pp. 4893-4896.
- IC-234. Chiu-yu Tseng, Lin-shan Lee, “Mandarin Spontaneous Narrative Planning - Prosodic Evidence from National Taiwan University Lecture Corpus”, Interspeech, Brighton, UK, Sep 2009, pp. 2943-2946.
- IC-235. Lin-shan Lee, “Voice-based Information Retrieval - how far are we from the text-based information

- retrieval?” (invited paper), IEEE Workshop on Automatic Speech Recognition and Understanding, Merano, Italy, Dec 2009, pp. 26-43.
- IC-236. Hung-yi Lee, Lin-shan Lee, “Spoken Term Detection from Bilingual Spontaneous Speech Using Code-switched Lattice-based Structures for Words and Subword Units”, IEEE Workshop on Automatic Speech Recognition and Understanding, Merano, Italy, Dec 2009, pp. 410-415.
- IC-237. Hao Tang, Chao-Hong Meng, Lin-shan Lee, “An Initial Attempt for Phoneme Recognition Using Structured Support Vector Machine (SVM)”, International Conference on Acoustics, Speech and Signal Processing, Dallas, Texas, U.S.A., Mar 2010, pp. 4926-4929.
- IC-238. Yu-Hui Chen, Chia-Chen Chou, Hung-yi Lee, Lin-shan Lee, “An Initial Attempt to Improve Spoken Term Detection by Learning Optimal Weights for Different Indexing Features”, International Conference on Acoustics, Speech and Signal Processing, Dallas, Texas, U.S.A., Mar 2010, pp. 5278-5281.
- IC-239. Hung-yi Lee, Lin-shan Lee, “Integrating Recognition and Retrieval with User Feedback: A New Framework for Spoken Term Detection”, International Conference on Acoustics, Speech and Signal Processing, Dallas, Texas, U.S.A., Mar 2010, pp. 5290-5293.
- IC-240. Chun-An Chan, Lin-shan Lee, “Unsupervised Spoken-Term Detection with Spoken Queries Using Segment-based Dynamic Time Warping”, Interspeech, Makuhari, Japan, Sep 2010, pp. 693-696.
- IC-241. Shang-Wen Li, Liang-che Sun, Lin-shan Lee, “Improved Phoneme Recognition by Integrating Evidence from Spectro-temporal and Cepstral Features”, Interspeech, Makuhari, Japan, Sep 2010, pp. 1177-1180.
- IC-242. Hung-yi Lee, Chia-Ping Chen, Ching-Feng Yeh, Lin-shan Lee, “Improved Spoken Term Detection by Discriminative Training of Acoustic Models based on User Relevance Feedback”, Interspeech, Makuhari, Japan, Sep 2010, pp. 1273-1276.
- IC-243. Chia-Ping Chen, Hung-yi Lee, Ching-Feng Yeh, Lin-shan Lee, “Improved Spoken Term Detection by Feature Space Pseudo-Relevance Feedback”, Interspeech, Makuhari, Japan, Sep 2010, pp. 1672-1675.
- IC-244. Yow-Bang Wang, Lin-shan Lee, “Mandarin Tone Recognition using Affine Invariant Prosodic Feature and Tone Posteriorgram”, Interspeech, Makuhari, Japan, Sep 2010, pp. 2850-2853.
- IC-245. Ching-Feng Yeh, Chao-Yu Huang, Liang-Che Sun, Lin-shan Lee, “An Integrated Framework for Transcribing Mandarin-English Code-mixed Lectures with Improved Acoustic and Language Modeling”, The 7th International Symposium on Chinese Spoken Language Processing, Tainan, Taiwan, Republic of China, Nov 2010, pp. 214-219.
- IC-246. Yun-Nung Chen, Yu Huang, Sheng-Yi Kong, Lin-shan Lee, “Automatic Key Term Extraction From Spoken Course Lectures Using Branching Entropy and Prosodic/Semantic Features”, IEEE Workshop on Spoken Language Technology, Berkeley, California, U.S.A., Dec 2010, pp. 265-270.
- IC-247. Hung-yi Lee, Chia-Ping Chen, Ching-Feng Yeh, Lin-shan Lee, “A Framework Integrating Different Relevance Feedback Scenarios and Approaches For Spoken Term Detection”, IEEE Workshop on Spoken Language Technology, Berkeley, California, U.S.A., Dec 2010, pp. 389-394.
- IC-248. Ching-Feng Yeh, Liang-Che Sun, Chao-Yu Huang, Lin-shan Lee, “Bilingual Acoustic Modeling with State Mapping and Three-Stage Adaptation for Transcribing Unbalanced Code-Mixed Lectures”, International Conference on Acoustics, Speech and Signal Processing, Prague, Czech Republic, May 2011, pp. 5020-5023.

- IC-249. Shang-Wen Lee, Liang-Che Sun, Lin-shan Lee, “Multi-Stream Spectro-Temporal and Cepstral Features Based on Data-Driven Hierarchical Phoneme Clusters”, International Conference on Acoustics, Speech and Signal Processing, Prague, Czech Republic, May 2011, pp. 5196-5199.
- IC-250. Yun-Nung Chen, Chia-Ping Chen, Hung-yi Lee, Chun-An Chan, Lin-shan Lee, “Improved Spoken Term Detection with Graph-Based Re-Ranking in Feature Space”, International Conference on Acoustics, Speech and Signal Processing, Prague, Czech Republic, May 2011, pp. 5644-5647.
- IC-251. Hung-yi Lee, Tsung-Wei Tu, Chia-Ping Chen, Chao-Yu Huang, Lin-shan Lee, “Improved Spoken Term Detection Using Support Vector Machines Based on Lattice Context Consistency”, International Conference on Acoustics, Speech and Signal Processing, Prague, Czech Republic, May 2011, pp. 5648-5651.
- IC-252. Chun-An Chan, Lin-shan Lee, “Integrating Frame-Based and Segment-Based Dynamic Time Warping for Unsupervised Spoken Term Detection with Spoken Queries”, International Conference on Acoustics, Speech and Signal Processing, Prague, Czech Republic, May 2011, pp. 5652-5655.
- IC-253. Yun-Nung Chen, Yu Huang, Ching-Feng Yeh, Lin-shan Lee, “Spoken Lecture Summarization by Random Walk over a Graph Constructed with Automatically Extracted Key Terms”, Interspeech, Florence, Italy, Aug 2011, pp. 933-936.
- IC-254. Chun-An Chan, Lin-shan Lee, “Unsupervised Hidden Markov Modeling of Spoken Queries for Spoken Term Detection without Speech Recognition”, Interspeech, Florence, Italy, Aug 2011, pp. 2141-2144.
- IC-255. Shang-Wen Li, Yow-Bang Wang, Liang-Che Sun, Lin-shan Lee, “Improved Tonal Language Speech Recognition by Integrating Spectro-Temporal Evidence and Pitch Information with Properly Chosen Tonal Acoustic Units”, Interspeech, Florence, Italy, Aug 2011, pp. 2293-2296.
- IC-256. Ching-Feng Yeh, Chao-Yu Huang, Lin-shan Lee, “Bilingual Acoustic Model Adaptation by Unit Merging on Different Levels and Cross-Level Integration”, Interspeech, Florence, Italy, Aug 2011, pp. 2317-2320.
- IC-257. Tsung-Wei Tu, Hung-yi Lee, Lin-shan Lee, “Improved Spoken Term Detection Using Support Vector Machines with Acoustic and Context Features From Pseudo-Relevance Feedback”, IEEE Workshop on Automatic Speech Recognition and Understanding, Hawaii, Dec 2011, pp. 383-388.
- IC-258. Chang Yang, Lin-shan Lee, “Two-Dimensional Frame-and-Feature Weighted Viterbi Decoding for Robust Speech Recognition”, International Conference on Acoustics, Speech and Signal Processing, Kyoto, Japan, Mar 2012, pp. 4689-4692.
- IC-259. Ching-Feng Yeh, Aaron Heidele, Hong-Yi Lee, Lin-shan Lee, “Recognition of Highly Imbalanced Code-Mixed Bilingual Speech with Frame-Level Language Detection Based on Blurred Posteriorgram”, International Conference on Acoustics, Speech and Signal Processing, Kyoto, Japan, Mar 2012, pp. 4873-4876.
- IC-260. Yun-Nung Chen, Yu Huang, Hung-yi Lee, Lin-shan Lee, “Unsupervised Two-Stage Keyword Extraction from Spoken Documents by Topic Coherence and Support Vector Machine”, International Conference on Acoustics, Speech and Signal Processing, Kyoto, Japan, Mar 2012, pp. 5041-5044.
- IC-261. Yow-Bang Wang, Lin-shan Lee, “Improved Approaches of Modeling and Detecting Error Patterns with Empirical Analysis for Computer-Aided Pronunciation Training”, International Conference on Acoustics, Speech and Signal Processing, Kyoto, Japan, Mar 2012, pp. 5049-5052.

- IC-262. Hung-yi Lee, Yun-Nung Chen, Lin-shan Lee, “Utterance-Level Latent Topic Transition Modeling for Spoken Documents and its Application in Automatic Summarization”, International Conference on Acoustics, Speech and Signal Processing, Kyoto, Japan, Mar 2012, pp. 5065-5068.
- IC-263. Tsung-Wei Tu, Hung-yi Lee, Yu-Yu Chou, Lin-shan Lee, “Semantic Query Expansion and Context-Based Discriminative Term Modeling for Spoken Document Retrieval”, International Conference on Acoustics, Speech and Signal Processing, Kyoto, Japan, Mar 2012, pp. 5085-5088.
- IC-264. Ting-yao Hu, Yu Tsao, Lin-shan Lee, “Discriminative Fuzzy Clustering Maximum a Posterior Linear Regression for Speaker Adaptation”, Interspeech, Portland, U.S.A., Sep 2012, pp. 567-570.
- IC-265. Yow-Bang Wang, Lin-shan Lee, “Error Pattern Detection Integrating Generative and Discriminative Learning for Computer-Aided Pronunciation Training”, Interspeech, Portland, U.S.A., Sep 2012, pp. 819-822.
- IC-266. Hung-yi Lee, Yu-yu Chou, Yow-Bang Wang, Lin-shan Lee, “Supervised Spoken Document Summarization Jointly Considering Utterance Importance and Redundancy by Structured Support Vector Machine”, Interspeech, Portland, U.S.A., Sep 2012, pp. 2342-2345.
- IC-267. Tsung-Hsien Wen, Hung-yi Lee, Lin-shan Lee, “Interactive Spoken Content Retrieval with Different Types of Actions Optimized by a Markov Decision Process”, Interspeech, Portland, U.S.A., Sep 2012, pp. 2458-2461.
- IC-268. Hung-yi Lee, Po-wei Chou, Lin-shan Lee, “Open-Vocabulary Retrieval of Spoken Content with Shorter/Longer Queries Considering Word/Subword-based Acoustic Feature Similarity”, Interspeech, Portland, U.S.A., Sep 2012, pp. 2077-2080.
- IC-269. Hung-yi Lee, Tsung-Hsien Wen, Lin-shan Lee, “Improved Semantic Retrieval of Spoken Content By Language Models Enhanced With Acoustic Similarity Graph”, IEEE Workshop on Spoken Language Technology (SLT), Miami, U.S.A., Dec 2012, pp. 182-187.
- IC-270. Tsung-Hsien Wen, Hung-yi Lee, Tai-Yuan Chen, Lin-shan Lee, “Personalized Language Modeling by Crowd Sourcing With Social Network Data For Voice Access Of Cloud Applications”, IEEE Workshop on Spoken Language Technology (SLT), Miami, U.S.A., Dec 2012, pp. 188-193.
- IC-271. Ching-Feng Yeh, Yiu-Chang Lin, Lin-shan Lee, “Minimum Phone Error Model Training On Merged Acoustic Units For Transcribing Bilingual Code-Switched Speech”, The 8th International Symposium on Chinese Spoken Language Processing, Hong Kong, Dec 2012, pp. 320-324.
- IC-272. Pei-hao Su, Yow-Bang Wang, Tien-han Yu, Lin-shan Lee, “A Dialogue Game Framework with Personalized Training using Reinforcement Learning for Computer-Assisted Language Learning”, International Conference on Acoustics, Speech and Signal Processing, Vancouver, Canada, May 2013, pp. 8213-8217.
- IC-273. Yow-Bang Wang, Lin-shan Lee, “Toward Unsupervised Discovery of Pronunciation Error Patterns using Universal Phoneme Posteriorgram for Computer-Assisted Language Learning”, International Conference on Acoustics, Speech and Signal Processing, Vancouver, Canada, May 2013, pp. 8232-8236.
- IC-274. Hung-yi Lee, Yun-Chiao Li, Cheng-Tao Chung, Lin-shan Lee, “Enhancing Query Expansion for Semantic Retrieval of Spoken Content with Automatically Discovered Acoustic Patterns”, International Conference on Acoustics, Speech and Signal Processing, Vancouver, Canada, May 2013, pp. 8297-8301.

- IC-275. Hung-yi Lee, Yu-yu Chou, Yow-Bang Wang, Lin-shan Lee, “Unsupervised Domain Adaptation for Spoken Document Summarization with Structured Support Vector Machine”, International Conference on Acoustics, Speech and Signal Processing, Vancouver, Canada, May 2013, pp. 8347-8351.
- IC-276. Tsung-Hsien Wen, Hung-yi Lee, Pei-Hao Su, Lin-shan Lee, “Interactive Spoken Content Retrieval by Extended Query Model and Continuous State Space Markov Decision Process”, International Conference on Acoustics, Speech and Signal Processing, Vancouver, Canada, May 2013, pp. 8510-8514.
- IC-277. Chun-an Chan, Cheng-Tao Chung, Yu-Hsin Kuo, Lin-shan Lee, “Toward Unsupervised Model-based Spoken Term Detection with Spoken Queries without Annotated Data”, International Conference on Acoustics, Speech and Signal Processing, Vancouver, Canada, May 2013, pp. 8550-8554.
- IC-278. Cheng-Tao Chung, Chun-an Chan, Lin-shan Lee, “Unsupervised Discovery of Linguistic Structure Including Two-level Acoustic Patterns Using Three Cascaded Stages of Iterative Optimization”, International Conference on Acoustics, Speech and Signal Processing, Vancouver, Canada, May 2013, pp. 8081-8085.
- IC-279. Ching-Feng Yeh, Hung-yi Lee, Lin-shan Lee, “Speaking Rate Normalization with Lattice-based Context-dependent Phoneme Duration Modeling for Personalized Speech Recognizers on Mobile Devices”, Interspeech, Lyon, France, Aug 2013, pp. 1741-1745.
- IC-280. Sz-Rung Shiang, Hung-yi Lee, Lin-shan Lee, “Supervised Spoken Document Summarization Based on Structured Support Vector Machine with Utterance Clusters as Hidden Variables”, Interspeech, Lyon, France, Aug 2013, pp. 2728-2732.
- IC-281. Pei-hao Su, Yow-Bang Wang, Tsung-Hsien Wen, Tien-Han Yu, Lin-shan Lee, “A Recursive Dialogue Game Framework with Optimal Policy Offering Personalized Computer-Assisted Language Learning”, Interspeech, Lyon, France, Aug 2013, pp. 490-494.
- IC-282. Tsung-Hsien Wen, Aaron Heidel, Hung-yi Lee, Yu Tsao, Lin-shan Lee, “Recurrent Neural Network Based Language Model Personalization by Social Network Crowdsourcing”, Interspeech, Lyon, France, Aug 2013, pp. 2703-2707.
- IC-283. Pei-hao Su, Tien-Han Yu, Ya-Yunn Su, Lin-shan Lee, “A Cloud-based Personalized Recursive Dialogue Game System for Computer-Assisted Language Learning”, ISCA Special Interest Group (SIG) on Speech and Language Technology in Education, Grenoble, France, Sep 2013, pp. 37-42.
- IC-284. Pei-hao Su, Tien-han Yu, Ya-Yunn Su, Lin-shan Lee, “NTU Chinese 2.0: A Personalized Recursive Dialogue Game for Computer-Assisted Learning of Mandarin Chinese”, demonstration paper, ISCA Special Interest Group (SIG) on Speech and Language Technology in Education, Grenoble, France, Sep 2013, pp.104.
- IC-285. Yun-Chiao Li, Hung-yi Lee, Cheng-Tao Chung, Chun-an Chan, Lin-shan Lee, “Towards Unsupervised Semantic Retrieval of Spoken Content with Query Expansion Based on Automatically Discovered Acoustic Patterns”, IEEE Automatic Speech Recognition and Understanding Workshop, Olomouc, Czech, Dec 2013, pp. 198-203.
- IC-286. Ching-Feng Yeh, Lin-Shan Lee, “Transcribing Code-Switched Bilingual Lectures Using Deep Neural Networks with Unit Merging in Acoustic Modeling”, IEEE International Conference on Acoustics, Speech and Signal Processing, Florence, Italy, May 2014, pp. 220-224.
- IC-287. Cheng-Tao Chung, Chun-an Chan, Lin-shan Lee, “Unsupervised Spoken Term Detection with Spoken

- Queries by Multi-Level Acoustic Patterns with Varying Model Granularity”, IEEE International Conference on Acoustics, Speech and Signal Processing, Florence, Italy, May 2014, pp. 7864-7868.
- IC-288. Cheng-Tao Chung, Hsin-Kuan Hsiung, Cheng-Kuang Wei, Lin-shan Lee, “Personalized Video Summarization Based on Multi-layered Probabilistic Latent Semantic Analysis with Shared Topics”, 2014 International Symposium on Chinese Spoken Language Processing, Singapore, Sept 2014, pp. 173-177.
- IC-289. Sz-Rung Shiang, Hung-yi Lee, Lin-shan Lee, “Spoken Question Answering using Tree-structured Conditional Random Fields and Two-layer Random Walk”, Interspeech, Singapore, Sept 2014, pp. 263-267.
- IC-290. Han Lu, Sheng-syun Shen, Sz-Rung Shiang, Hung-yi Lee, Lin-shan Lee, “Alignment of Spoken Utterances with Slide Content for Easier Learning with Recorded Lectures using Structured Support Vector Machine (SVM)”, Interspeech, Singapore, Sept 2014, pp. 1473-1477.
- IC-291. Yuan-ming Liou, Yi-sheng Fu, Hung-yi Lee, Lin-shan Lee, “Semantic Retrieval of Personal Photos using Matrix Factorization and Two-layer Random Walk Fusing Sparse Speech Annotations with Visual Features”, Interspeech, Singapore, Sept 2014, pp. 1762-1766.
- IC-292. Cheng-Tao Chung, Wei-Ning Hsu, Cheng-Yi Lee, Lin-shan Lee, “Enhancing Automatically Discovered Multi-Level Acoustic Patterns Considering Context Consistency with Applications in Spoken Term Detection”, IEEE International Conference on Acoustics, Speech and Signal Processing, Brisbane, Australia, Apr 2015, pp. 5231-5235.
- IC-293. Yuan-ming Liou, Hung-tsung Lu, Yi-sheng Fu, Winston Hsu, Lin-shan Lee, “Enhancing Sparse Voice Annotation for Semantic Retrieval of Personal Photos by Continuous Space Word Representations”, IEEE International Conference on Acoustics, Speech and Signal Processing, Brisbane, Australia, Apr 2015, pp. 5341-5345.
- IC-294. Hung-tsung Lu, Yuan-ming Liou, Hung-yi Lee, Lin-shan Lee, “Semantic Retrieval of Personal Photos using a Deep Autoencoder Fusing Visual Features with Speech Annotations Represented as Word/Paragraph Vectors”, Interspeech, Dresden, Germany, Sept 2015, pp. 140-144.
- IC-295. Sheng-syun Shen, Hung-yi Lee, Shang-wen Li, Victor Zue, Lin-shan Lee, “Structuring Lectures in Massive Open Online Courses (MOOCs) for Efficient Learning by Linking Similar Sections and Predicting Prerequisites”, Interspeech, Dresden, Germany, Sept 2015, pp. 1363-1367.
- IC-296. Ching-Feng Yeh, Yuan-ming Liou, Hung-yi Lee, Lin-shan Lee, “Personalized Speech Recognizer with Keyword-based Personalized Lexicon and Language Model using Word Vector Representations”, Interspeech, Dresden, Germany, Sept 2015, pp. 3521-3525.
- IC-297. Yi-Hsiu Liao, Hung-yi Lee, Lin-shan Lee, “Towards Structured Deep Neural Network for Automatic Speech Recognition”, IEEE Automatic Speech Recognition and Understanding Workshop, Scottsdale, Arizona, USA, Dec 2015, pp. 137-144.
- IC-298. Bo-Hsiang Tseng, Hung-yi Lee, Lin-shan Lee, “Personalizing A Universal Recurrent Neural Network Language Model with User Characteristic Features by Social Network Crowdsourcing”, IEEE Automatic Speech Recognition and Understanding Workshop, Scottsdale, Arizona, USA, Dec 2015, pp. 84-91.
- IC-299. Cheng-Tao Chung, Cheng-Yu Tsai, Hsiang-Hung Lu, Chia-Hsiang Liu, Hung-yi Lee, Lin-shan Lee, “An Iterative Deep Learning Framework for Unsupervised Discovery of Speech Features and

- Linguistic Units with Applications on Spoken Term Detection”, IEEE Automatic Speech Recognition and Understanding Workshop, Scottsdale, Arizona, USA, Dec 2015, pp. 245-251.
- IC-300. Yu-An Chung, Chao-Chung Wu, Chia-Hao Shen, Hung-yi Lee, Lin-shan Lee, “AudioWord2Vec: Unsupervised Learning of Audio Segment Representations using Sequence-to-sequence Autoencoder”, Interspeech, San Francisco, USA, Sept 2016, pp. 765-769.
- IC-301. Yen-Chen Wu, Tzu-Hsiang Lin, Yang-De Chen, Hung-yi Lee, Lin-shan Lee, “Interactive Spoken Content Retrieval by Deep Reinforcement Learning”, Interspeech, San Francisco, USA, Sept 2016, pp. 943-947.
- IC-302. Bo-Hsiang Tseng, Sheng-Syun Shen, Hung-yi Lee, Lin-shan Lee, “Towards Machine Comprehension of Spoken Content: Initial TOEFL Listening Comprehension Test by Machine”, Interspeech, San Francisco, USA, Sept 2016, pp. 2731-2735.
- IC-303. Lang-Chi Yu, Hung-yi Lee, Lin-shan Lee, “Abstractive Headline Generation for Spoken Content by Attentive Recurrent Neural Networks with ASR Error Modeling” IEEE Workshop on Spoken Language Technology (SLT), San Diego, California, USA, Dec 2016, pp. 151-157.
- IC-304. Wei Fang, Jui-Yang Hsu, Hung-yi Lee, Lin-shan Lee “Hierarchical Attention Model for Improved Comprehension of Spoken Content”, IEEE Workshop on Spoken Language Technology (SLT), San Diego, California, USA, Dec 2016, pp. 234-238.
- IC-305. Cheng-Kuan Wei, Cheng-Tao Chung, Hung-yi Lee, Lin-shan Lee, “Personalized Acoustic Modeling by Weakly Supervised Multi-Task Deep Learning Using Acoustic Tokens Discovered from Unlabeled Data”, IEEE International Conference on Acoustics, Speech and Signal Processing, New Orleans, USA, March 2017, pp. 5165-5169.
- IC-306. Bo-Ru Lu, Frank Shyu, Yun-Nung Chen, Hung-yi Lee, Lin-shan Lee “Order-Preserving Abstractive Summarization for Spoken Content Based on Connectionist Temporal Classification”, Interspeech, Stockholm, Sweden, Aug 2017, pp. 2899-2903.
- IC-307. Zih-Wei Lin, Tzu-Wei Sung, Hung-yi Lee, Lin-shan Lee “Personalized Word Representations Carrying Personalized Semantics Learned from Social Network Posts”, IEEE Automatic Speech Recognition and Understanding Workshop, Okinawa, Japan, Dec 2017, pp. 533-540.
- IC-308. Yu-Hsuan Wang, Hung-yi Lee, Lin-shan Lee, “Segmental Audio Word2Vec: Representing Utterances as Sequences of Vectors with Applications in Spoken Term Detection”, IEEE International Conference on Acoustics, Speech and Signal Processing, Calgary, Alberta, Canada, April 2018, pp. 6269-6273.
- IC-309. Che-Ping Tsai, Yi-Lin Tuan, Lin-shan Lee, “Transcribing Lyrics from Commercial Song Audio: the First Step towards Singing Content Processing”, IEEE International Conference on Acoustics, Speech and Signal Processing, Calgary, Alberta, Canada, April 2018, pp. 5749-5753.
- IC-310. Chih-Wei Lee, Yau-Shian Wang, Tsung-Yuan Hsu, Kuan-Yu Chen, Hung-yi Lee, Lin-shan Lee, “Scalable Sentiment for Sequence-To-Sequence Chatbot Response with Performance Analysis”, IEEE International Conference on Acoustics, Speech and Signal Processing, Calgary, Alberta, Canada, April 2018, pp. 6164-6168.
- IC-311. Hsien-Chin Lin, Chi-Yu Yang, Hung-yi Lee, Lin-shan Lee, “Domain Independent Key Term Extraction from Spoken Content Based on Context and Term Location Information in the Utterances”, IEEE International Conference on Acoustics, Speech and Signal Processing, Calgary, Alberta, Canada,

April 2018, pp. 6044-6048.

C. Local Journals

- LJ-1. Lin-shan Lee, “Speech Encryption - A Tutorial”, (in Chinese), Invited Tutorial, Computer Quarterly, Vol. 15, No. 2, Special Issue on Information Security, Jun 1981, pp. 11-26.
- LJ-2. Ching-sung Chang, Lin-shan Lee, “The Implementation of A New Speech Scrambling System Using Bit-slice Microprocessor”, (in Chinese), Electrical Engineering Bimonthly, Vol. 24, No. 3, Sep 1981, pp. 1-3.
- LJ-3. Shaw-min Lei, Lin-shan Lee, “Digital Synthesis of Mandarin Speech Using Its Special Characteristics”, Journal of the Chinese Institute of Engineers, Vol. 6, No. 2, Mar 1983, pp. 107-115.
- LJ-4. Hen-wai Tsao, Tung-sen Cheng, Lin-shan Lee, “Design and Implementation of A High Efficiency TFM Digital Modem”, Journal of the Chinese Institute of Engineers, Vol. 7, No. 1, Jan 1984, pp. 43-54.
- LJ-5. Jing-chung Juang, Lin-shan Lee, “The Feasibility of A Text-independent Speaker Recognition System”, Bulletin of the College of Engineering, National Taiwan University, No. 35, Mar 1984, pp. 111-116.
- LJ-6. Jeng-Neng Hwang, Lin-shan Lee, “Dynamic Data Compression Algorithms in Speech Coding”, Journal of the Chinese Institute of Engineers, Vol. 8, No. 3, 1985, pp. 261-270.
- LJ-7. Jing-chung Juang, Lin-shan Lee, “Efficient Speech Coding Techniques by Simplified Orthogonal Transformation”, Journal of the Chinese Institute of Engineers, Vol. 8, No. 3, 1985, pp. 317-324.
- LJ-8. Jung-Hui Chiu, Lin-shan Lee, “Direct Sequence Voice Scrambling - A New Technique for Secure Communications”, Journal of the Chinese Institute of Engineers, Vol. 8, No. 4, Oct 1985, pp. 397-404.
- LJ-9. Jung-Hui Chiu, Lin-shan Lee, “A Graphic Approach to Draw the S-curves for the Symbol Synchronizers”, Journal of the Chinese Institute of Engineers, Vol. 9, No. 4, 1986, pp. 417-422.
- LJ-10. Jung-Hui Chiu, Lin-shan Lee, “A Digital PN Signal Correlator with Improved Performance”, Journal of the Chinese Institute of Engineers, Vol. 9, No. 5, 1986, pp. 527-531.
- LJ-11. Lin-shan Lee, Chiu-yu Tseng, “Mandarin Speech Input/Output Techniques for Chinese Computers -The State of the Art”, Invited Review Paper, Proceedings of the National Science Council, Part A: Physical Science and Engineering, Vol. 11, No. 4, Jul 1987, pp. 273-290.
- LJ-12. Yen-ming Hsu, Chiu-yu Tseng, Lin-shan Lee, “A Segmental Model Approach for Mandarin Final Recognition”, Bulletin of the College of Engineering, National Taiwan University, No. 41, Dec 1987, pp. 27-39.
- LJ-13. Kuen Tsair Lay, Hen-wai Tsao, Lin-shan Lee, “A Decision-aided Algorithm for Adaptive Equalizers in Digital Transmissions”, Journal of the Chinese Institute of Engineers. Vol. 11, No. 5, 1988, pp. 555-562.
- LJ-14. Hung-yan Gu, Chiu-yu Tseng, Lin-shan Lee, “A Comparative Study on the Performance of Several Speech Recognition Techniques Applied on the Highly Confusing Mandarin Syllables”, Journal of the Chinese Institute of Engineers, Vol. 12, No. 6, 1989, pp. 705-713.
- LJ-15. S. H. Hsieh, C. H. Chen, Lin-shan Lee, “The Overall System Design and Implementation of a Mandarin Dictation Machine”, Bulletin of the College of Engineering, National Taiwan University, No. 50, Oct 1990, pp. 71-88.

- LJ-16. Hsin-min Wang, Lin-shan Lee, “Tone Recognition for Continuous Mandarin Speech with Limited Training Data Using Selected Context-dependent Hidden Markov Models”, Journal of the Chinese Institute of Engineers, Vol. 17, No. 6, Dec 1994, pp. 775-784.

D. Local Conferences

- LC-1. Fan-tung Tseng, Lin-shan Lee, “A Geometric Approach Using P, Q-planes to Analyze the Wave Polarization Problems in Satellite Communications”, 1981 National Symposium on Electromagnetic Waves and Communications, May 1981, Taipei, Taiwan, Republic of China, pp. 346-362.
- LC-2. Ching-sung Chang, Lin-shan Lee, “The Implementation of a New Speech Scrambling System Using Bit-slice Microprocessor”, 1981 National Symposium on Electromagnetic Waves and Communications, May 1981, Taipei, Taiwan, Republic of China, pp. 160-185.
- LC-3. Lin-shan Lee, “Digital Radio Transmission - A Review” (in Chinese), Workshop on Data Communications, Oct 1981, Academia Sinica, Taipei, Taiwan, Republic of China, pp. 191-201.
- LC-4. Shaw-min Lei, Lin-shan Lee, “Preliminary Results of A Typical Four-tone Pitch Contour Approach for Chinese Speech Synthesis”, National Computer Symposium, Tainan, Taiwan, Republic of China, Dec 1981, pp. 125-136.
- LC-5. Lin-shan Lee, “Speech Coding/Synthesis Algorithms”, Invited Tutorial, The First Conference on Computer Algorithms, Jul 5, 6, 1982, Hsinchu, Taiwan, Republic of China, Proceedings, pp. 1.1-1.68.
- LC-6. Jeng-Neng Hwang, Shiann-ning Jean, Lin-shan Lee, “Speech Compression Techniques and Combination with Linear Prediction”, International Computer Symposium, Dec 1982, Taichung, Taiwan, Republic of China, pp. 870-880.
- LC-7. Yi-ping Hung, Hung-yung Wang, Ho-ming Lin, Lin-shan Lee, “The Software Simulation and Hardware Implementation of A New Speech Scrambling System”, International Computer Symposium, Dec 1982, Taichung, Taiwan, Republic of China, pp. 855-869.
- LC-8. Wei-chung Peng, Hen-wai Tsao, Lin-shan Lee, “The Software Simulation of A 16 QAM Digital Transmission System”, International Computer Symposium, Dec 1982, Taichung, Taiwan, Republic of China, pp. 895-904.
- LC-9. Wen-mei Hwu, Ming Ouh-young, Lin-shan Lee, “A Chinese Text-to-speech Development System”, National Computer Symposium, Dec 1983, Hsinchu, Taiwan, Republic of China, pp. 420-429.
- LC-10. Jeng-Neng Hwang, Lin-shan Lee, “Dynamic Data Compression Algorithms in Speech Coding”, National Computer Symposium, Dec 1983, Hsinchu, Taiwan, Republic of China, pp. 430-439.
- LC-11. Ming Ouh-young, Chiu-yu Tseng, Lin-shan Lee, “Design Considerations and Preliminary Results for A Chinese Text-to-speech System”, 1984 International Computer Symposium, Dec 1984, Tamkang University, Taipei, Taiwan, Republic of China, pp. 1331-1341.
- LC-12. Ming Ouh-young, Chen-chao Chu, Lin-shan Lee, “Algorithms for Multi-pulse Linear Predictive Speech Coding”, 1984 International Computer Symposium, Dec 1984, Tamkang University, Taipei, Taiwan, Republic of China, pp. 1323-1330.
- LC-13. Kuo-chung Lee, Hen-wai Tsao, Lin-shan Lee, “The Computer Simulation of High Speed Digital Radio Communication Systems”, 1985 National Telecommunications Symposium, Sep 1985, Taipei, Taiwan, Republic of China, pp. 581-596.

- LC-14. Jung-Hui Chiu, Lin-shan Lee, “Minimum Likelihood Versus Maximum Likelihood Synchronization”, 1985 National Telecommunications Symposium, Sep 1985, Taipei, Taiwan, Republic of China, pp. 1-8.
- LC-15. Ming Ouh-young, Ching-jiang Hsieh, Chiu-yu Tseng, Lin-shan Lee, “The System Configuration and Performance Evaluation for the Chinese Text-to-speech System”, National Computer Symposium, Dec 1985, Kaohsiung, Taiwan, Republic of China, pp. 183-191.
- LC-16. Guey-shya Chen, Chia-chuan Hsiao, Chiu-yu Tseng, Lin-shan Lee, “A Two-pass Recognition System for Vowels of Isolated Mandarin Morphemes”, National Computer Symposium, Dec 1985, Kaohsiung, Taiwan, Republic of China, pp. 349-356.
- LC-17. Ming-shing Yu, Chia-chuan Hsiao, Chiu-yu Tseng, Lin-shan Lee, “A Two-pass Recognition System for Consonants of Isolated Mandarin Morphemes”, National Computer Symposium, Dec 1985, Kaohsiung, Taiwan, Republic of China, pp. 357-364.
- LC-18. Biing-ching Wang, Chiu-yu Tseng, Lin-shan Lee, “A Three Pass Mandarin Vowel Recognition System”, International Computer Symposium, Dec 1986, Tainan, Taiwan, Republic of China, pp. 1144-1149.
- LC-19. Yen-ming Hsu, Chiu-yu Tseng, Lin-shan Lee, “Mandarin Vowel Recognition Based Upon A Segmental Model”, International Computer Symposium, Dec 1986, Tainan, Taiwan, Republic of China, pp. 1150-1154.
- LC-20. Chia-wha Hwang, Chiu-yu Tseng, Lin-shan Lee, “An Efficient Mandarin Vowel Recognition System Based Upon Vector Quantization and Branch-and-bound Classification Techniques”, International Computer Symposium, Dec 1986, Tainan, Taiwan, Republic of China, pp. 1155-1159.
- LC-21. Chia-wha Huang, Chiu-yu Tseng, Lin-shan Lee, “A Multisection Vector Quantization Mandarin Vowel Recognition System”, National Telecommunications Symposium, Taipei, Taiwan, Republic of China, Dec 1986, pp. 219-228.
- LC-22. Chien-Hsing Wu, Chiu-yu Tseng, Lin-shan Lee, “New Recognition Techniques for Unvoiced Mandarin Consonants Based Upon Hidden Markov Models”, National Computer Symposium, Dec 1987, Taipei, Taiwan, Republic of China, pp. 973-979.
- LC-23. Pei-Yih Ting, Chiu-Yu Tseng, Lin-shan Lee, “A Mandarin Consonant Recognition System Based Upon Time, Frequency Domain Features and Finite State Vector Quantization”, National Computer Symposium, Dec 1987, Taipei, Taiwan, Republic of China, pp. 980-987.
- LC-24. Ching-Jiang Hsieh, Chiu-yu Tseng, Lin-shan Lee, “A Chinese Text-to-speech System Based Upon Formant Synthesis Techniques”, National Computer Symposium, Dec 1987, Taipei, Taiwan, Republic of China, pp. 988-996.
- LC-25. Sheng-Yuan Lin, Hen-wai Tsao, Lin-shan Lee, “An Integrable Modem With Full Digital Carrier and Timing Recovery”, National Telecommunications Symposium, Taipei, Taiwan, Republic of China, Dec 1987, pp. 231-238.
- LC-26. Po-ki Chen, Chiu-yu Tseng, Lin-shan Lee, “A Hybrid Algorithm for Real-time, Speaker Independent Mandarin Word Recognition Utilizing the Mono-syllabic Nature of Mandarin Chinese”, National Telecommunications Conference, Taipei, Taiwan, Republic of China, Dec 1987, pp. 451-460.
- LC-27. Yen-ming Hsu, Ming-inn Hao, Ting-Kuang Chiang, Lin-shan Lee, “Preliminary Results of Mandarin Syllable Recognition Using Neural Networks”, National Telecommunications Symposium, Hsinchu,

- Taiwan, Republic of China, Dec 1988, pp. 547-556.
- LC-28. Hung-yan Gu, Chiu-yu Tseng, Lin-shan Lee, “A Comparative Study on the Performance of Several Speech Recognition Techniques Applied on the Highly Confusing Mandarin Syllables”, International Computer Symposium, Tamkang University, Taipei, Taiwan, Republic of China, Dec 1988, pp. 532-537.
- LC-29. Jung-juey Chen, Lin-shan Lee, “Automatic Segmentation Techniques for Mandarin Speech Recognition”, International Computer Symposium, Tamkang University, Taipei, Taiwan, Republic of China, Dec 1988, pp. 538-542.
- LC-30. Hung-yan Gu, Chiu-yu Tseng, Lin-shan Lee, “Hidden Markov Models with Bounded State Durations for Recognition of Highly Confusing Mandarin Syllables”, Telecommunications Symposium, Taipei, Taiwan, Republic of China, Dec 1989, pp. 27-34.
- LC-31. Hung-yan Gu, Chiu-yu Tseng, Lin-shan Lee, “Complete Mandarin Lexical Tone Recognition for Isolated Syllables Based Upon Hidden Markov Models”, Telecommunications Symposium, Taipei, Taiwan, Republic of China, Dec 1989, pp. 35-42.
- LC-32. C. H. Chang, Lin-shan Lee, “Training and Simulation for Syllable Models in A Mandarin Dictation Machine”, National Computer Symposium, Taipei, Taiwan, Republic of China, Dec 1989, pp. 738-746.
- LC-33. Hung-yan Gu, Chiu-yu Tseng, Lin-shan Lee, “Markov Modeling of Chinese Language for Linguistically Decoding the Mandarin Phonetic Input”, National Computer Symposium, Taipei, Taiwan, Republic of China, Dec 1989, pp. 759-767.
- LC-34. C. C. Chen, Lin-shan Lee, “An Initial Study on Speaker Adaptation Techniques for Isolated Mandarin Syllable Recognition”, Telecommunications Symposium, Hsinchu, Taiwan, Republic of China, Dec 1990, pp. 116-121.
- LC-35. Lee-feng Chien, K. J. Chen, Lin-shan Lee, “A Direction-selective Chart and A Head-driven Chart Parser for Chinese Sentence Analysis”, International Computer Symposium, Hsinchu, Taiwan, Republic of China, Dec 1990, pp. 529-534.
- LC-36. G. S. Chen, Ja-lin Wu, Lin-shan Lee, “Signal Reconstruction from Hartley Transform Magnitudes”, International Computer Symposium, Hsinchu, Taiwan, Republic of China, Dec 1990, pp. 835-839.
- LC-37. Ching-hsiang Tseng, Lin-shan Lee, “An Initial Study on Large Vocabulary Continuous Mandarin Speech Recognition”, International Computer Symposium, Hsinchu, Taiwan, Republic of China, Dec 1990, pp. 981-986.
- LC-38. Sung-Chien Lin, Lee-Feng Chien, Keh-Jiann Chen, Lin-shan Lee, “A World-Class Bigram Approach to Linguistic Decoding in Mandarin Speech Recognition”, REPUBLIC OF CHINA Computational Linguistics Conference VI, Hsi-tou, Taiwan, Republic of China, Aug 1993, pp. 143-160.
- LC-39. Hsin-min Wang, Yuan-Cheng Chang, Lin-shan Lee, “Automatic Selection of Phonetically Balanced Sentences from a Large Chinese Text Corpus”, REPUBLIC OF CHINA Computational Linguistics Conference VI, Hsi-tou, Taiwan, Republic of China, Aug 1993, pp. 195-206.
- LC-40. Yuan-Cheng Chang, Sung-Chien Lin, Lee-Feng Chien, Keh-Jiann Chen, Lin-shan Lee, “Methodology, Implementation and Applications of Word-class-based Language Model in Mandarin Speech Recognition”, REPUBLIC OF CHINA Computational Linguistics Conference VII, Hsin-Chu, Taiwan, Republic of China, Aug 1994, pp. 17-30.

- LC-41. Hsin-min Wang, Renyuan Lyu, Jia-lin Shen, Lin-shan Lee, “An Initial Study on Large-Vocabulary Continuous Mandarin Speech Recognition with Limited Training Data Based on Sub-Syllabic Models”, International Computer Symposium, Hsinchu, Taiwan, Republic of China, Dec 1994, pp. 1140-1145.
- LC-42. Sung-Chien Lin, J. L. Tsai, Lee-Feng Chien, K. J. Chen, Lin-shan Lee, “Training, Detection and Adaptation of Multi-domain Language Models for Mandarin Speech Recognition”, Republic of China Computational Linguistics Conference, ROCLING IX, Tainan, Taiwan, Republic of China, Aug 1996.
- LC-43. Bo-Ren Bai, Lin-shan Lee, “A Local-Segment-Based Approach for Spotting Large Vocabulary Chinese Keywords from Mandarin Speech”, International Computer Symposium, Kaohsiung, Taiwan, Republic of China, Dec 1996.
- LC-44. Jia-Lin Shen, Ying-Chieh Tu, Po-Yu Liang, Lin-shan Lee, “Speaker Independent Continuous Mandarin Speech Recognition Under Telephone Environment”, Research on Computational Linguistics, ROCLING XI, Hsinchu, Taiwan, Republic of China, Aug 1998, pp. 119-138.
- LC-45. Chun-Liang Chen, Bo-Ren Bai, Lee-Feng Chien, Lin-shan Lee, “CPAT-Tree-Based Language Models with An Application for Text Verification in Chinese”, Research on Computational Linguistics, ROCLING XI, Hsinchu, Taiwan, Republic of China, Aug 1998, pp. 189-204.
- LC-46. Jieh-Weih Hung, Jia-Lin Shen, Lin-shan Lee, “Recent Results on Improved Parallel Model Combination Approaches for Speech Recognition Under Noisy Environment”, 1998 International Symposium on Multi-media Information Processing, Chung-Li, Taiwan, Republic of China, Dec 1998, pp. 80-87.