

# CHILIN SHIH

Department of East Asian Languages and Cultures  
Department of Linguistics  
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## EDUCATION

Ph.D. in Linguistics. University of California at San Diego, 1986.

M.A. in Linguistics. University of Hawaii at Manoa, 1979.

B.A. in Chinese Language and Literature. National Taiwan University, 1977.

## EMPLOYMENT

2007–. Associate Professor, Department of East Asian Languages and Cultures,  
Department of Linguistics, University of Illinois at Urbana-Champaign.

2003–2007. Assistant Professor, Department of East Asian Languages and  
Cultures, Department of Linguistics, University of Illinois at Urbana-Champaign.

1993–2001. Member of the Technical Staff, Bell Laboratories, Lucent  
Technologies.

1989–1993. Assistant Professor, Department of East Asian Languages and  
Cultures, Rutgers University.

1987–1989. Assistant Professor, Department of Modern Languages and  
Linguistics, Cornell University. Director, the Chinese Language Program.

1986–1987. Postdoctoral Member of Technical Staff, AT&T Bell Laboratories.

## AWARD

*List of Teachers Ranked as Excellent by Their Students*

- Spring 2018. \*EALC 550 : Chinese Language Processing
- Fall 2017. Ling 542: Phonology II
- Spring 2017. EALC 430: Introduction to Chinese Linguistics
- Fall 2016. Chinese 305: Advanced Chinese I

- Spring 2016. Chinese 306: Advanced Chinese II
- Spring 2016. \*EALC 550: Prosody of East Asian Languages
- Spring 2015. Chinese 306: Advanced Chinese II
- Fall 2013. \*EALC 588: Language Teaching Technologies
- Fall 2010. EALC 550: Prosody of East Asian Languages
- Fall 2006. Ling 591: Corpus Methods and Modeling for Phonetics and Phonology

Focal Point. UIUC Graduate College. 2010.

2007–2008 Helen Corely Petit Scholar. Award for extraordinary record of tenure and promotion in the College of Liberal Arts and Sciences, University of Illinois at Urbana-Champaign.

Campus Award for Innovation in Undergraduate Instruction Using Educational Technologies, University of Illinois at Urbana-Champaign, 2006.

Arnold O. Beckman Research Award, University of Illinois at Urbana-Champaign, 2004–2005.

## FELLOWSHIPS AND GRANTS

*Multi-media Interlanguage speech corpus for intelligent Chinese pronunciation training*, Zhang, Jingson (PI), Yiya Chen, Chilin Shih, Yanlu Xie (co-PI). Innovation Center for Language Resources, China. 2017-2020.

SLCL Undergraduate Research Award. *The Improvement of Elicited Imitation for Chinese Proficiency Testing*. Xun Yan (PI), Chilin Shih (co-PI), Yuyun Lei (RA). 2017.

*Innovative Platform for the Study of Intelligent Technology for Teaching Chinese Pronunciation*. Xie, Yanlu (PI), Mark Hasegawa-Johnson, Chilin Shih, Jinsong Zhang (co-PI), Awards for Innovative Platforms, Beijing Language and Culture University. 2016-2019.

National Institutes of Health T32-HD055272, “Language Processing: A Training Program.” Kathryn Bock (PI), Kiel Christianson, Gary Dell, Kara Federmeier, Duane Watson, Jennifer Cole, Susan Garnsey, Brian Ross, Elizabeth Stine-Morrow, Chilin Shih, Renee Baillargeon and Cynthia Fisher (co-PI). 1997–2014.

National Science Foundation Grant no. IIS-0623805 (\$680,781), “DHB: An Interdisciplinary Study of the Dynamics of Second Language Fluency.” Richard Sproat (PI), Mark Hasegawa-Johnson, Chilin Shih, J. Kathryn Bock and Brian Ross (co-PI). 2007–2010.

National Science Foundation Grant no. IIS-0534133 (\$250,000), “Collaborative Research: Translating Prosody in an English/Chinese Language Tutoring System.” Chilin Shih (PI) and Torrey Loucks (co-PI). 2009–2010.

National Science Foundation Grant no. IIS-0534133 (\$250,000), “Collaborative Research: Translating Prosody in an English/Chinese Language Tutoring System.” Chilin Shih (PI) and Gary Cziko, in collaboration with Julia Hirshberg (PI) and Martin Jansche at Columbia University. 2006–2009.

Critical Research Initiatives (CRI) Grant, UIUC (\$222,669), “Fluency and the Dynamics of Second Language Acquisition”. Richard Sproat (PI), Chilin Shih, Katherine Bock, Mark Hasegawa-Johnson and Brian Ross. 2005–2008.

National Science Foundation Grant no. IIS-0414117 (\$385,940), “Prosodic, Intonational, and Voice Quality Correlates of Disfluency.” Mark Hasegawa-Johnson (PI), Chilin Shih and Jennifer Cole. 2004–2007.

National Science Foundation REU supplementary award to IIS-0414117, 2005–2006.

Arnold O. Beckman Research Award, University of Illinois at Urbana-Champaign, “Modeling Tone and Focus Interaction in Chinese.” Chilin Shih (PI). 2004–2005.

National Science Foundation Grant no. BNS-90-21274. “Intonation in Tone Languages: A Comparative Study of Mandarin, Yoruba and Cantonese.” Chilin Shih (PI), Akinlabi Akinbiyi (co-PI), 1991–1993.

Research Council Grants, Rutgers University. “Word Boundary in Speech”, 1992.

Henry Rutgers Research Fellows, Rutgers University, 1989–1991.

University Grants for Newly Appointed Professors, Rutgers University, 1989.

Humanities Graduate Research Grant, University of California at San Diego, 1985.

Chancellor’s Associates Grant, University of California at San Diego, 1984.

## PATENTS

1. Method and apparatus for interactive language instruction. U. S. Patent no. 7,149,690, December 12, 2006.
2. Methods and apparatus for text to speech processing using language independent prosody markup. U. S. Patent no. 6,856,958, February 15, 2005.
3. Methods and apparatus for speaker specific durational adaptation. U. S. Patent no. 6,813,604, November 2, 2004.
4. Method and apparatus for controlling a speech synthesis system to provide multiple styles of speech. U. S. Patent no. 6,810,378, October 26, 2004.
5. Method and apparatus for filtering e-mail infected with a previously unidentified computer virus. U. S. Patent no. 20030204569. October 2003.
6. Method and apparatus for performing text-to-speech conversion in a client/server environment. U. S. Patent no. 6,625,576, September 23, 2003.
7. Method and apparatus for assembling a prediction list of name pronunciation variations for use during speech recognition. U. S. Patent no. 6,272,464, August 7, 2001.

## JOURNAL ARTICLES (\* Denotes reviewed publications. \*\* Denotes invited publications with special recognition.)

1. \* Yang Agnes Gao, Joseph C. Toscano, Chilin Shih, Darren Tanner. “Reassessing the electrophysiological evidence for categorical perception of Mandarin lexical tone: ERP evidence from native and nave non-native Mandarin listeners”. *Attention, Perception, and Psychophysics*, pp 1-15, 2018.
2. \* Li-Hsin Ning, Torrey M. Loucks, Chilin Shih. “Suppression of vocal responses to auditory perturbation with real-time visual feedback”. *Journal of the Acoustical Society of America*, Volume 143, Issue 6, pp 3698-3705, 2018.
3. \* Chilin Shih and Hsin-Yi Dora Lu. “Effects of talker-to-listener distance on tone.” *Journal of Phonetics* Volume 51, pp 6-35, 2015.
4. \* Li-Hsin Ning, Torrey M. Loucks, Chilin Shih. “The effects of language learning and vocal training on sensorimoto control of lexical tone.” *Journal of Phonetics* Volume 51, pp 50-69, 2015.
5. \* Yung-hsiang Shawn Chang, Chilin Shih. “Place contrast enhancement: The case of the alveolar and retroflex sibilant production in two dialects of Mandarin.” *Journal of Phonetics* Volume 50, pp 52-66, 2015.

6. \* Li-Hsin Ning, Chilin Shih, Torrey Loucks. “Mandarin tone learning in L2 adults: A test of perceptual and sensorimotor contributions”. *Speech Communication*. Volumes 63-64, pp 55-69, 2014.
7. \* Anastassia Loukina, Burton Rosner, Greg Kochanski, Elinor Keane, Chilin Shih. “What determines duration-based rhythm measures: text or speaker?” *Laboratory Phonology*. 4(2): 339-382. 2013.
8. \* Anastassia Loukina, Greg Kochanski, Burton Rosner, Elinor Keane, Chilin Shih. “Rhythm measures and dimensions of durational variation in speech.” *Journal of the Acoustical Society of America*. Volume 129, Issue 5, pp. 3258-3270, 2011.
9. \* Chris Carignan, Ryan Shosted, Chilin Shih and Panying Rong. “Compensatory articulation in American English nasalized vowels.” *Journal of Phonetics* 39, 668-682. 2011.
10. \* Chilin Shih. “The language class as a community: A task design for speaking proficiency training.” *Journal of the Chinese Language Teachers Association*, 41 (2), pp. 1–22, 2006.
11. \* Chilin Shih and Greg Kochanski. “Modeling of vocal styles using portable features and placement rules.” *International Journal of Speech Technology*, 6(4), pp. 393-408, 2003.
12. \* Greg Kochanski and Chilin Shih. “A quasi-glottogram signal.” *The Journal of the Acoustical Society of America*, 114(4), pp. 2206-2216, 2003.
13. \* Greg Kochanski, Chilin Shih and Hongyan Jing. “Quantitative measurement of prosodic strength in Mandarin.” *Speech Communication*, 41(4), pp. 625-645, 2003.
14. \* Greg Kochanski and Chilin Shih. “Prosody modeling with soft templates.” *Speech Communication*, 39(3-4), pp. 311-352, 2003.
15. \* Greg Kochanski, Chilin Shih and Hongyan Jing. “Hierarchical structure and word strength prediction of Mandarin prosody.” *International Journal of Speech Technology*, 6(1), pp. 33-43, 2003.
16. \* Chilin Shih. “Generation and normalization of tonal variations.” *Journal of Chinese Linguistics*, No. 17, pp. 32-52, 2001.
17. \* Jan van Santen and Chilin Shih. “Suprasegmental and segmental timing models in Mandarin Chinese and American English.” *Journal of the Acoustical Society of America*, 107 (2), pp. 1012-1026, 2000.

18. \* Chilin Shih and Richard Sproat, "Issues in text-to-speech conversion for Mandarin." *Computational Linguistics and Chinese Language Processing*, 1(1), pp. 37-86, 1996.
19. \* Pilar Prieto, Chilin Shih and Holly Nibert. "Pitch downtrend in Spanish." *Journal of Phonetics*, 24(4), pp. 445-473, 1996.
20. \* Richard Sproat and Chilin Shih. "A corpus-based analysis of Mandarin nominal root compounds." *Journal of East Asian Linguistics*, No. 5, 49-71, 1996.
21. \* Richard Sproat, Chilin Shih, William Gale and Nancy Chang, "A stochastic finite-state word-segmentation algorithm for Chinese." *Computational Linguistics*, 22(3), pp. 377-404, 1996.
22. \* Richard Sproat and Chilin Shih, "Why Mandarin morphology is not stratum-ordered." *Yearbook of Morphology*, pp. 185-217, 1993.
23. \* Richard Sproat and Chilin Shih, "A statistical method for finding word boundaries in Chinese text." *Computer Processing of Chinese and Oriental Languages*, 4, pp. 336-351, 1990.
24. \* Shari Speer, Chilin Shih and Maria Slowiaczek, "Prosodic structure in language understanding: Evidence from tone sandhi in Mandarin." *Language and Speech*, 32(4), 337-354, 1989.

**BOOK CHAPTERS** (\* Denotes reviewed publications. \*\* Denotes invited publications with special recognition.)

1. \* Chen-Huei Wu and Chilin Shih. "A design of the spontaneous Chinese learner speech corpus". *Learner Corpus Studies in Asia and the World*, vol 2: 115-126. Shin'ichiro Ishikawa ed. Kobe: Kobe University. 2014.
2. \* Chilin Shih. "Linking phonology and phonetics: An implementation model of tones." *Interfaces in Chinese Phonology: Festschrift in Honor of Matthew Y. Chen on His 70th Birthday*, Yuchau Hsiao and Hui-chuan Hsu and Lian-Hee Wee and Dah-an Ho (eds.), Academic Sinica. pp. 99-120, 2008.
3. \* Chilin Shih. "A declination model of Mandarin Chinese." *Intonation: Analysis, Modelling and Technology*, Antonis Botinis (ed.), Kluwer Academic Publishers, pp. 243-268, 2000.
4. \*\* Chilin Shih and Joe Olive. "Phonetics research at Bell Laboratories." *A Guide to the History of the Phonetic Sciences in the U. S.*, John Ohala et. al. eds. University of California, Berkeley, pp. 39-42, 1999.

5. Chilin Shih, “Tone and intonation in Mandarin.” *Working Papers of the Cornell Phonetics Laboratory*, N. Clements (ed), No. 3, pp. 83–109, 1988.
6. \* Jan van Santen, Chilin Shih and Bernd Möbius, “Intonation.” in *Multilingual Text-to-Speech Synthesis: The Bell Labs Approach*. Richard Sproat (ed.), Kluwer Academic Publishers, pp. 141–190, 1998.
7. \* Joe Olive, Jan van Santen, Bernd Möbius and Chilin Shih. “Synthesis.” in *Multilingual Text-to-Speech Synthesis: The Bell Labs Approach*. Richard Sproat (ed.), Kluwer Academic Publishers, pp. 191–228, 1998.
8. \* Chilin Shih and Benjamin Ao, “Duration study for the Bell Laboratories Mandarin text-to-speech system.” *Progress in Speech Synthesis*, J. van Santen et. al. (eds.), New York: Springer-Verlag, pp. 382–399, 1997.
9. \* Chilin Shih, “Mandarin third tone sandhi and prosodic structure”. In J. Wang and N. Smith (eds). *Studies in Chinese Phonology* , Mouton de Gruyter, pp. 81–123, 1997.
10. Pilar Prieto, Holly Nibert and Chilin Shih, “The absence or presence of a declination effect on the descent of  $f_0$  peaks? Evidence from Mexican Spanish.” In K. Zagana (ed.) *Grammatical Theory and Romance Languages*. John Benjamins Publishing Company, 1996.
11. \*\* Richard Sproat and Chilin Shih, “The cross-linguistic distribution of adjective ordering restrictions.” In C. Georgopoulos and R. Ishihara (eds.) *Interdisciplinary Approaches to Language: Essays in Honor of S.-Y. Kuroda*, pp. 565–593, Dordrecht: Kluwer Academic Publishers, 1990.

**CONFERENCE PROCEEDINGS** (\* Denotes reviewed publications. \*\* Denotes invited publications with special recognition.)

1. \* Yan Sun, Chilin Shih. “Effects of semantic similarity and focus on the resolution of ambiguous sentences.” *ProsLang: Workshop on the Processing of Prosody across Languages and Varieties*. Wellington, New Zealand. November 2018.
2. \* Yiyi Wang, Chilin Shih. “A hybrid approach combining statistical knowledge with conditional random fields for Chinese grammatical error detection.” *Proceedings of the 5th Workshop on Natural Language Processing Techniques for Educational Applications*, pp 194-198. Publisher: Association for Computational Linguistics. Melbourne, Australia, July 2018.

3. Yiyi Wang, Yanan Liu, Chilin Shih. “Automated Essay Scoring Using Deep Neural Networks”. MSLD 2017.
4. \* Agnes Yang Gao, Darren Tanner, Jerome Packard, Chilin Shih. “Categorization of Mandarin lexical tones in native and naive non-native listeners: ERP evidence”. *Cognitive Neuroscience Society*. San Francisco. March 2017.
5. \* Chilin Shih. “Measures of tone difficulty”. *The Spring 2015 Meeting of the Acoustical Society of America*. Pittsburgh, PA, May 2015.
6. \* Di Wu and Chilin Shih. “Dialectal Duration Variations Reveal Historical Sound Change”. *The Spring 2015 Meeting of the Acoustical Society of America*. Pittsburgh, PA, May 2015.
7. \* Yi Young Kim and Chilin Shih. “Mapping second language learners’ accent of Spanish”. *18th International Congress of Phonetic Sciences*. Glasgow, Scotland, UK. August 10-14, 2015.
8. \* Chen-huei Wu, Chilin Shih and Weirong Chen. “An articulatory study of high vowels in Mandarin produced by native and non-native speakers”. *The 168th Meeting of the Acoustical Society of America*. Indianapolis, Indiana, October 2014.
9. \* Li-Hsin Ning, Torrey Loucks, Chilin Shih. “Auditory Influences on Second Language Learning: Tone Discrimination Interacts with Audiovocal Responses.” *Proceedings of the 19th Congrès International des Linguistes*, Geneva, 2013.
10. \* Chen-Huei Wu, Chilin Shih. “A corpus study of native and non-native vowel quality.” *Speech Prosody 2012*, Shanghai, China. 2012.
11. \* Yung-Hsiang Shawn Chang, Chilin Shih. “Using Map Tasks to Investigate the Effect of Contrastive Focus on the Mandarin Alveolar-Retroflex Contrast.” *Speech Prosody 2012*, Shanghai, China. 2012.
12. \* Li-Hsin Ning, Chilin Shih. “Prosodic Effects on Garden-path Sentences.” *Proceedings of the 6th International Conference on Speech Prosody*, Shanghai, China. 2012.
13. \* Chilin Shih, Chen-Huei Wu. “Evaluating Second Language Fluency”. *New Tools and Methods for Very-Large-Scale Phonetics Research*, Philadelphia, 2011.
14. \* Greg Kochanski, Chilin Shih and Ryan Shosted. “Should Corpora be Big, Rich, or Dense?” *New Tools and Methods for Very-Large-Scale Phonetics Research*, Philadelphia, 2011.



15. \* Chilin Shih and Hsin-Yi Dora Lu. "Prosody Transfer and Suppression: Stages of Tone Acquisition". *Speech Prosody 2010*, Chicago, 2010.
16. \* Chilin Shih, Hsin-Yi Dora Lu, Lu Sun, Jui-Ting Huang, Jerry Packard. "An Adaptive Training Program for Tone Acquisition". *Speech Prosody 2010*, Chicago, 2010.
17. \* Greg Kochanski, Anastassia Loukina, Elinor Keane, Chilin Shih and Burton Rosner. "Long-range prosody prediction and rhythm". *Speech Prosody 2010*, Chicago, 2010.
18. \* Chen-Huei Wu and Chilin Shih. "Mandarin Vowels Revisited: Evidence from Electromagnetic Articulography Study". *Proceedings of the 35th Berkeley Linguistics Society*, 2009.
19. \* A. Loukina, G. Kochanski, C. Shih, E. Keane and I. Watson. "Rhythm measures with language-independent segmentation." *Proceedings of interspeech 2009: Speech and Intelligence*. Brighton, UK. 6-10 September, International Speech Communications Association. 2009.
20. \* Jui-Ting Huang, Mark Hasegawa-Johnson and Chilin Shih. "Unsupervised Prosodic Break Detection in Mandarin Speech". *Speech Prosody 2008*, Brazil, 2008.
21. \* Chilin Shih, Greg Kochanski and Su-Youn Yoon, "The Missing Link between Articulatory Gestures and Sentence Planning". *Proceedings of The International Congress of Phonetic Sciences*, Saarbrücken, Germany, August 6-10, 2007.
22. \* Greg Kochanski and Chilin Shih. "Planning compensates for the mechanical limitations of articulation." *Proceedings of Speech Prosody 2006*, Dresden, Germany. May 2-6, 2006.
23. \* Chilin Shih. "Understanding phonology by phonetic implementation." *Proceedings of Interspeech 2005*, Lisbon, Portugal. September 4-8, 2005.
24. \*\* Chilin Shih. "Tonal effects on intonation." *International Symposium on Tonal Aspects of Languages: Emphasis on Tone Languages*, Beijing, China, pp. 163-168, March 28-30, 2004.
25. \* Jiahong Yuan and Chilin Shih. "Confusability of Chinese intonation." *Proceedings of Speech Prosody 2004*, Nara, Japan, pp. 131-134, March 23-26, 2004.

26. \* Mark Hasegawa-Johnson, Jennifer Cole, Chilin Shih, Ken Chen, Aaron Cohen, Sandra Chavarria, Heejin Kim, Taejin Yoon, Sarah Borys and Jeung-Yoon Choi, "Speech Recognition Models of the Interdependence Among Syntax, Prosody, and Segmental Acoustics." *HLT/NAACL Workshop on Higher-Level Linguistic and Other Knowledge for Automatic Speech Processing*, Boston, MA, pp. 56–63, May 7, 2004.
27. \* Chilin Shih and Greg Kochanski. "Modeling intonation: Asking for confirmation in English." *Proceedings of the 15th International Congress of Phonetic Sciences*, August 3–9, Barcelona, Spain, 2003.
28. \* Hongyan Jing, Daniel Lopresti and Chilin Shih. "Summarizing noisy documents." *Proceedings of Symposium on Document Image Understanding Technology*, Greenbelt, MD, pp. 111-119, April 2003.
29. \* Hongyan Jing, Daniel Lopresti and Chilin Shih. "Summarization of noisy documents: a pilot study." *Proceedings of the HLT-NAACL 03 Text Summarization Workshop*, Edmonton, Canada, pp. 25–32, May 31-June 1 2003.
30. \* Daniel Lopresti, Chilin Shih and Greg Kochanski. "Human interactive proofs for spoken language interfaces." *Proceedings of the First Workshop on Human Interactive Proofs*, Palo Alto, CA, pp. 30-34, January 2002.
31. \* Jiahong Yuan, Chilin Shih and Greg P. Kochanski, "Comparison of declarative and interrogative intonation in Chinese." *Proceedings of the Speech Prosody 2002 Conference*, Aix-en-Provence, Laboratoire Parole et Langage, pp. 711-714, April 11-13, 2002.
32. \* Greg Kochanski, Daniel Lopresti and Chilin Shih, "A Reverse Turing test using speech." *Proceedings of the Seventh International Conference on Spoken Language Processing*, Denver, Colorado, pp. 1357-1360, September 17-20, 2002.
33. \* Tan Lee, Greg Kochanski, Chilin Shih and Yujia Li, "Modeling tones in continuous Cantonese speech." *Proceedings of the International Conference on Speech and Language Processing*, Colorado, pp. 2401-2404, September 17–20, 2002.
34. \* Fabian Monrose, Michael Reiter, Qi Li, Daniel Lopresti, Chilin Shih. "Toward speech-generated cryptographic keys on resource-constrained devices." *Proceedings of the Eleventh USENIX Security Symposium*, San Francisco, CA, pp. 283-296, August 2002.
35. \* Chilin Shih, Greg Kochanski, Eric Fosler-Lussier, Melody Chan and Jia-Hong Yuan, "Implications of prosody modeling for prosody recognition." *Proceedings*

- of the ISCA Tutorial and Research Workshop on Prosody in Speech Recognition and Understanding*, Red Bank, NJ, pp. 133-138, October 22-24, 2001.
36. \* Chilin Shih and Greg Kochanski, "Synthesis of prosodic styles." *Proceedings of the Fourth ISCA Tutorial and Research Workshop on Speech Synthesis*, Perthshire, Scotland, pp 229-234, August 29th-September 1st, 2001.
  37. \* Greg Kochanski, Chilin Shih and Hongyan Jing, "Hierarchical structure and word strength prediction of Mandarin prosody." *Proceedings of the Fourth ISCA Tutorial and Research Workshop on Speech Synthesis*, Perthshire, Scotland, pp. 217-222, August 29th-September 1st, 2001.
  38. \* Chilin Shih and Greg Kochanski, "Prosody control for speaking and singing styles." *Proceedings of EUROSPEECH 2001*, Aalborg, Denmark, pp. 669-672, September 3-7, 2001.
  39. \* Greg Kochanski and Chilin Shih, "Automated modelling of Chinese intonation in continuous speech." *Proceedings of EUROSPEECH 2001*, Aalborg, Denmark, pp. 911-914, September 3-7, 2001.
  40. \* Chilin Shih and Greg Kochanski, "Chinese tone modeling with Stem-ML." *The Sixth International Conference on Spoken Language Processing*, Beijing, China, pp. 67-70, October 16-20, 2000.
  41. \* Greg Kochanski and Chilin Shih. "Stem-ML: Language independent prosody description." *The Sixth International Conference on Spoken Language Processing*, Beijing, China, pp. 239-242, October 16-20, 2000.
  42. \* Costas Christogiannis, Yiannis Stavroulas, Yiannis Vamvakoulas, Theodora A. Varvarigou, Agatha Zappa, Chilin Shih, Amalia Arvaniti. "Design and implementation of a Greek text-to-speech system based on concatenative synthesis." "Sixth International Conference on Spoken Language Processing", ICSLP 2000/INTERSPEECH 2000, Beijing, China, October 16-20, 2000.
  43. \* Chilin Shih, Bernd Möbius, Bhuvana Narasimhan. "Contextual effects on consonant voicing profiles: A cross-linguistic study." *Proceedings of the 14th International Congress of Phonetic Sciences*, San Francisco, CA, pp. 989-992, 1999.
  44. \* Chilin Shih and Bernd Möbius. "Contextual effects on the voicing profiles of German and Mandarin consonants." *Proceedings of the Fifth International Conference on Spoken Language Processing*, Sidney, Australia, pp. 3135-3138, November 30th-December 4th, 1998.

45. \* Chilin Shih and Bernd Möbius. "Contextual effects on voicing profiles of German and Mandarin consonants." *Proceedings of the Third International Workshop on Speech Synthesis*, Jenolan Caves, Australia, pp. 81-86, November 26-29, 1998.
46. \* Chilin Shih, Wentao Gu, Jan van Santen. "Efficient adaptation of TTS duration model to new speakers." *Proceedings of the Third International Workshop on Speech Synthesis (SSW3-1998)*, Jenolan Caves, Australia, pp. 105-110, November 26-29, 1998.
47. \* Jan van Santen, Bernd Möbius, Jennifer Venditti and Chilin Shih. "Description of the Bell Labs intonation system." *Proceedings of the Third International Workshop on Speech Synthesis*, Jenolan Caves, Australia, pp. 293-298, November 26-29, 1998.
48. \* Chilin Shih, Wentao Gu and Jan van Santen. "Efficient adaptation of TTS duration model to new speakers." *Proceedings of the Fifth International Conference on Spoken Language Processing*, Sidney, Australia, no. 177, November 30th-December 4th, 1998.
49. \* Richard Sproat and Chilin Shih, "Prenominal adjectival ordering in English and Mandarin." *Proceedings of the 18th Annual Meeting of the North East Linguistics Society*, pp. 465-489, 1988.
50. \* Chilin Shih "Declination in Mandarin." *Intonation: Theory, Models and Applications. Proceedings of ESCA Intonation Workshop*, Athens, Greece, pp. 293-296, 1997.
51. \* Elena Pavlova, Yuri Pavlov, Richard Sproat, Chilin Shih and Jan van Santen. "The Bell Laboratories Russian text-to-speech system" *Proceedings of EUROSPEECH '97*, Rhodes, Greece, pp. 2451-2454. 1997.
52. \* Jan van Santen, Chilin Shih, Bernd Mobius, Evelyne Tzoukermann and Michael Tanenblatt. "Multilingual duration modeling" *Proceedings of EUROSPEECH '97*, Rhodes, Greece, pp. 2651-2654, 1997.
53. \* Chilin Shih, "Synthesis of trill." *International Conference on Spoken Language Processing*, Philadelphia, PA, pp. 2223-2226, October 1996.
54. \* Chilin Shih, "Study of vowel variations for a Mandarin speech synthesizer." *Proceedings of EUROSPEECH '95*, Madrid, Spain, pp. 1807-1810, 1995.
55. \* Pilar Prieto and Chilin Shih, "Effects of tonal clash on downstep H\* accents in Spanish." *EUROSPEECH '95*, Madrid, pp. 1307-1310, 1995.

56. \* Richard Sproat and Chilin Shih, "A corpus-based analysis of Mandarin nominal root compounds." *Proceedings of the Sixth North American Conference on Chinese Linguistics*, 1995.
57. \* Pilar Prieto, Holly Nibert and Chilin Shih, "Effects of phrasal length and time distance between peaks on peak height in Mexican Spanish." *International Conference on Spoken Language Processing*, pp. 730-733, 1995.
58. \* Richard Sproat, Chilin Shih, William Gale and Nancy Chang, "A Stochastic finite-state word-segmentation algorithm for Chinese." *32nd Annual Meeting of the Association for Computational Linguistics: Proceedings of the Conference*, pp. 66-73, 1994.
59. \* Chilin Shih and Benjamin Ao, "Duration study for the AT&T Mandarin text-to-speech system." *Conference Proceedings of the Second ESCA/IEEE Workshop on Speech Synthesis*, pp. 29-32, 1994.
60. \* Benjamin Ao, Chilin Shih and Richard Sproat, "A corpus-based Mandarin text-to-speech synthesizer." *Proceedings of the International Conference on Spoken Language Processing*, Yokohama, Japan, pp. 1771-1774, September 18-22, 1994.
61. \* Richard Sproat and Chilin Shih, "On the sources of some constraints on Mandarin morphology." *Proceedings of the Third International Symposium on Chinese Languages and Linguistics*, pp. 20-37, 1992.
62. \* Chilin Shih and Richard Sproat, "Variations of the Mandarin rising tone." In *Proceedings of the IRCS Workshop on Prosody in Natural Speech*, No. 92-37, University of Pennsylvania, pp. 193-200, 1992.

## INVITED BOOK REVIEWS

1. Chilin Shih, "Review of Duanmu *The phonology of Standard Chinese* and Xu (ed.) *Chinese phonology in generative grammar*," *Phonology*, Vol. 21, pp. 287-292, 2004.
2. Chilin Shih, "Review of *Follow Jade! series: Visit Chinese kindergarten and Let's go to market in China*." *Asian Educational Media Service News and Reviews*, 7(2), p. 5, 2004.
3. Chilin Shih and Richard Sproat, "Review of Horne (ed.) *Prosody: Theory and Experiment. Studies Presented to Gösta Bruce*." *Computational Linguistics*, 27(3), pp. 450-456, 2001.

Chilin Shih, "Review of *Short Chinese TV Plays*," *The Modern Language Journal*, 77(1), p. 105, 1993.

4. Chilin Shih, "Review of *Teach Yourself Chinese*. *JCLTA: Journal of Chinese Language Teachers' Association* No. 1-2, pp. 115-119, 1992.

#### DISSERTATION ADVISOR/CHAIR

1. Theeraporn Ratitamkul, University of Illinois at Urbana-Champaign, *Argument Realization in Thai*, 2007. Now at Chulalongkorn University, Thailand.
2. Dora Hsinyi Lu, University of Illinois at Urbana-Champaign. *The Effects of Verb Bias, Context and Tasks on Mandarin Chinese Reflexives*. 2011. Now at National Taipei University of Education, Taiwan.
3. Chen-Huei Wu, University of Illinois at Urbana-Champaign, *The Evaluation of Second Language Fluency and Foreign Accent*. 2011. Now at National Tsing Hua University Nan-Da Campus, Taiwan.
4. Yung-Hsiang Shawn Chang, University of Illinois at Urbana-Champaign, *Variability in Cross-Dialectal Production and Perception of Contrasting Phonemes: The Case of the Alveolar-Retroflex Contrast in Beijing and Taiwan Mandarin*. 2012. Now at National Taipei University of Technology.
5. Yuan-Cheng Tu, University of Illinois at Urbana-Champaign, *English Complex Verb Constructions: Identification and Inference*. 2012. Now at Microsoft.
6. Jy-Yu Dolly Hsu. School of Music, University of Illinois at Urbana-Champaign, *A Study of Musical Settings and Lyrics of Early Taiwanese Popular Songs: From Birth of Taiwanese Popular Songs to Art Songs*. 2013.
7. Li-Hsin Ning, University of Illinois at Urbana-Champaign, *Effects of Auditory Feedback and Real-time Visual Feedback on Second Language Tone Learning*. 2014. Now at National Taiwan Normal University.
8. Andrew Hinderliter, University of Illinois at Urbana-Champaign, *The Evolution of Online Asexual Discourse*. 2016.
9. Di Wu, University of Illinois at Urbana-Champaign, *Cross-Regional Word Duration Patterns in Mandarin*. 2017.
10. John Jang, University of Illinois at Urbana-Champaign, *Measuring Changes in Cognitive Load in Language Processing through Measuring Postural Sway*. 2018.

11. Jing Chen, University of Illinois at Urbana-Champaign, *Anthologizing Culture: Publication and Reception of Ancient-Style Poetry Anthologies in Late Imperial China*. 2018.
12. Yiyi Wang, University of Illinois at Urbana-Champaign. In progress.
13. Yan Sun, University of Illinois at Urbana-Champaign. In progress.
14. Yinglun Sun, University of Illinois at Urbana-Champaign. In progress.
15. Shuju Shi, University of Illinois at Urbana-Champaign. In progress.
16. Helen Gent, University of Illinois at Urbana-Champaign. In progress.
17. Kailu Guan, University of Illinois at Urbana-Champaign. In progress.
18. Yuyun Lei, University of Illinois at Urbana-Champaign. In progress.
19. Hsinyi Lien, University of Illinois at Urbana-Champaign. In progress.
20. Jiani Lin, University of Illinois at Urbana-Champaign. In progress.

#### **MA THESIS ADVISOR/CHAIR**

1. Jonathan Hajek, University of Illinois at Urbana-Champaign, *Implicit graphemic cues in Thai reading*. MA in Linguistics. 2013.
2. John Hall, University of Illinois at Urbana-Champaign, *Examination of Machine Learning Methods for Multi-label Classification of Intellectual Property Documents* MA in Linguistics. 2017.
3. Yiru Chen. University of Illinois at Urbana-Champaign, MA in Asian Studies. 2017.

#### **DISSERTATION COMMITTEE**

1. Rukayyah Herzallah, *Aspects of the phonology of Palestinian Arabic: A non-linear approach*. Cornell University, 1990.
2. Yetunde Olabisi Laniran, *Intonation in tone languages: The phonetic implementation of tones in Yoruba*. Cornell University, 1992.
3. Jenny Wang, *The geometry of segmental features in Beijing Mandarin*. University of Delaware, 1993. Now at the United States Naval Academy.

4. Yi Xu, *Contextual tonal variation in Mandarin Chinese*, The University of Connecticut, 1993. Now at University College London.
5. Shengli Feng, *Prosody and Syntactic Structure in Chinese*. University of Pennsylvania, 1995. Now at Harvard University.
6. Yiya Chen, *The Phonetics and Phonology of Contrastive Focus in Standard Chinese*, State University of New York at Stony Brook, 2003. Now at the University of Nijmegen.
7. Jiahong Yuan, *Analysis and Modeling of Intonation in Mandarin Chinese*, Cornell University, 2004. Now at the University of Pennsylvania.
8. Erin O'Rourke, *Intonation and Language Contact: A Case Study of Two Varieties of Peruvian Spanish*, University of Illinois at Urbana-Champaign, 2005. Now at University of Pittsburgh.
9. Li-jen Kuo, *Effects of Bilingualism on Development of Facets of Phonological Competence*, University of Illinois at Urbana-Champaign, 2006. Now at Northern Illinois University.
10. Indranil Dutta, *Four-way stop contrasts in Hindi: An acoustic study of voicing, fundamental frequency and spectral tilt*. University of Illinois at Urbana-Champaign, 2006. Joining Nuance in Fall 2006. Now at Rice University.
11. Hee-Jin Kim, University of Illinois at Urbana-Champaign, 2006. Now a Post-doc Fellow of the Universal Access Automatic Speech Recognition Project, UIUC.
12. Jessica Miller, University of Illinois at Urbana-Champaign, 2007. Now at the University of Wisconsin Eau Claire.
13. Yudong Chen, University of Illinois at Urbana-Champaign, 2007.
14. Dinoj Surendran, The University of Chicago, Department of Computer Science. *Analysis and Automatic Recognition of Tones in Mandarin Chinese*, 2007. Now at Microsoft.
15. Zhi-Jun Wang, *Situation Type, Context Coercion and the Meanings of the Chinese Aspect Marker "le"*, University of Illinois at Urbana-Champaign, 2007. Now at the University of California at Davis.
16. Cecilia Ovesdotter Alm, University of Illinois at Urbana-Champaign, *Affect in Text and Speech*, 2007. Now at Rochester Institute of Technology.



17. Tae-Jin Yoon, University of Illinois at Urbana-Champaign, *A Predictive Model of Prosody Through Grammatical Interface: A Computational Approach*, 2007.
18. Letania Ferreira, University of Illinois at Urbana-Champaign, 2007.
19. Peter Parker, University of Illinois at Urbana-Champaign, *Examining the Comprehension Strategies of Chinese and English Readers: A Study of Bilingual and Monolingual First, Second and Third Grade Elementary School Students*. Department of Educational Psychology, 2008.
20. Panying Rong, Department of Speech and Hearing Science, University of Illinois at Urbana-Champaign, 2012.
21. Amanda Huensch, University of Illinois at Urbana-Champaign, 2013.
22. Marianna Nadeu, University of Illinois at Urbana-Champaign, 2013.
23. Christopher M. Carignan, Department of French, University of Illinois at Urbana-Champaign, 2013.
24. Lisa Pierce, Department of Linguistics. University of Illinois at Urbana-Champaign, 2014.
25. Zhiying Qian. Department of East Asian Languages and Cultures. University of Illinois at Urbana-Champaign, 2014.
26. Chen Li. Department of Linguistics. University of Illinois at Urbana-Champaign, 2015.
27. Nicole Wang, Department of Linguistics. University of Illinois at Urbana-Champaign, 2016.
28. Ji Young Kim. Department of Spanish, Italian and Portuguese. *The perception and production of prominence in Spanish by heritage speakers and L2 learners*. University of Illinois at Urbana-Champaign, 2016.
29. Jung Sun Kim. Department of East Asian Languages and Cultures. University of Illinois at Urbana-Champaign, 2016.
30. Marissa Barlaz. Department of Linguistics. Ph.D. Committee member, 2018.
31. Suyoen Im. Department of Linguistics. Ph.D. Committee member. University of Illinois at Urbana-Champaign, 2018.
32. Sarah Johnson. Department of Linguistics. Ph.D. Committee member. University of Illinois at Urbana-Champaign.

33. Chungyu Chen. Department of Linguistics. Ph.D. Committee member. University of Illinois at Urbana-Champaign.
34. Hang Zheng. Department of East Asian Languages and Cultures. Ph.D. Committee member. University of Illinois at Urbana-Champaign.
35. Bill Bryce. Department of Linguistics. Ph.D. Committee member. University of Illinois at Urbana-Champaign.
36. Wenqi Yang. Department of East Asian Languages and Cultures. Ph.D. Committee member. University of Illinois at Urbana-Champaign.
37. Junghwan Maeng. Department of East Asian Languages and Cultures. Ph.D. Committee member. University of Illinois at Urbana-Champaign.
38. Ryan Chandler. Informatics. Ph.D. Committee member. University of Illinois at Urbana-Champaign.

## **JOURNAL EDITORIAL BOARDS**

Associate Editor, Journal of Phonetics (2015- )

Editorial Board, *Phonetica* (2008-2015)

## **REVIEWER AND SCIENTIFIC COMMITTEES**

*AAAI*

*ACL: Computational Approaches to Linguistic Code-Switching*

*Ampersand, Artificial Intelligence, ASR Prosody workshop*

*Association of Computational Linguistics*

*Chinese and Oriental Languages Information Processing Society*

*Computer Speech and Language, Discourse Processes*

*ESCA*

*ICSLP, IEEE Transactions on Speech and Audio Processing*

*International Scientific Committee of Speech Prosody*

*International Scientific Committee of ICSLP*

*International Scientific Committee of the International Congress of Phonetic Sciences*

*International Scientific Committee of Interspeech*  
*Journal of Chinese Linguistics,*  
*Journal of East Asian Linguistics*  
*Journal of Linguistics,*  
*Journal of Phonetics*  
*Journal of the Acoustical Society of America*  
*Language, Language and Speech, Linguistic Inquiry*  
*National Science Foundation*  
*National Science Council, Taiwan, The Republic of China*  
*Natural Language and Linguistic Theory*  
*North East Linguistics Society, Perception and Psychophysics*  
*Phonology, ProsLang*  
Research Grants Council, Hong Kong, China  
*Speech Communication*  
*Scientific Committee of Human Interactive Proofs*  
*Studies in Prosodic Grammar*  
*The Netherlands Organisation for Scientific Research*

## **SYNERGISTIC ACTIVITIES**

Director of Graduate Studies, East Asian Languages and Cultures, UIUC.

LINGUIST List Advisory Board Panel.

Conference organizer *Speech Prosody 2000*.

Permanent Advisory Committee Member of *Speech Prosody*.

*Best Practice for Resource Conversion* for the E-MELD project (Electronic Metastructure for Endangered Languages Data).

*Prosody and Prosodic Models*. Conference tutorial for *The International Conference on Spoken Language Processing*, Denver, Colorado, September 16, 2002.

*Corpus-based Study of Chinese Phonology and Phonetics*. Summer workshop for the Taiwan Summer Institute of Linguistics: Corpus and Corpus Linguistics. Academia Sinica, Taipei, July 12–23, 2004.

*LSA 313: Corpus Methods for Phonetics and Phonology*. Course taught at the Linguistic Institute 2007, Stanford University, CA.

Program committee of numerous conferences.

## INVITED TALKS

“Documentation of the Singing Culture of Zhuang”, Linguistic Seminar, UIUC, October 10, 2016.

“Language Technologies for the Documentation of a Singing Culture”, Midwest Speech and Language Days and Midwest Computational Linguistics Colloquium 2016. Indiana University, Bloomington. May 13-14, 2016.

“Second Language Fluency: A Corpus Approach”. National Hsinchu University of Education, Taiwan. August, 2015.

“Teaching Chinese tones: The design, application and effect of an on-line adaptive training system.” Taipei University of Education, Taiwan. August, 2015.

“Second Language Fluency: Training and Research”. Chinese Academy of Social Sciences, Beijing, China. June 8, 2015.

“An Adaptive Tone Training Program: Using Talker-to-Listener Distances to Bootstrap Difficulty Scoring”, Beijing Language and Culture University, Beijing, China. June 9, 2015.

“The Effect of Talker-to-Listener Distance on Tone”, Beijing Language and Culture University, Beijing, China. June 9, 2015.

“Understanding Phonology by Phonetic Implementation: Mandarin Tone 2 Sandhi”, Minzu University of China, Beijing, China. June 11, 2015,

“The Effect of Talker-to-Listener Distance on Tone”, ICPS-1, Tianjin Normal University, Tianjin, China, June 12-14, 2015.

“Measures of Tone Difficulty”, Nankai University, Tianjin, China. June 12-14, 2015.

“Multi-dimensional adaptive pronunciation training”, Midwest Speech and Language Days 2013. Chicago. May 2-3, 2013.

“Linking phonology and phonetics: An implementation model of tones.” Keynote address, The Second Theoretical Phonology Conference, Taipei, Taiwan, January, 2009.

“A Phonetic Implementation Model of Mandarin Tones.” Linguistics Colloquium Series, Indiana University. March 25, 2008.

“Adaptive Training Paradigm for Tone Acquisition.” University of Illinois at Urbana-Champaign, Speech and Hearing Pro-Seminar, March 6, 2008.

“Adaptive Training Paradigm for Tone Acquisition.” University of Illinois at Urbana-Champaign, Linguistics Colloquium, January 31, 2007.

“An Adaptive Training Paradigm for Tone Acquisition.” University of Victoria, Canada, November 30, 2007.

“TEAL at UIUC.” The 2007 Symposium on Asia in the Curriculum, Columbia University, September 28, 2007.

“A Phonetic Implementation Model of Mandarin Tones.” Penn Speaker Series, University of Pennsylvania, September 20, 2007.

“Adaptive Training of Chinese Tones.” Columbia University, September 27, 2007.

“Adaptive Training of Chinese Tones.” University of Pennsylvania, September 20, 2007

“The Missing Link between Articulatory Gestures and Sentence Planning”. The International Congress of Phonetic Sciences, Saarbrücken, Germany, August 6-10, 2007.

“Why a Rising Tone is Falling in Mandarin Sentences.” Word Accents and Tones in Sentence Perspective. A Symposium in Conjunction with the 60th Birthday of Professor Gösta Bruce, Lund University, Sweden, January 10, 2007.

“Planning Compensates for the Mechanical Limitations of Articulation.” Speech Prosody 2006, Dresden, Germany, May 2-6, 2006.

“A Phonetician’s Guide to Audio Formats,” OLAC Tutorial, Linguistic Society of America, January 5-8, 2006, Albuquerque, New Mexico.

“Prosody Learning and Generation.” Department of Computer Science, University of Illinois at Urbana-Champaign, September 15, 2005

“Understanding Phonology by Phonetic Implementation,” Department of Linguistics, University of Illinois at Urbana-Champaign, November 10, 2005.

“Miscommunication in China, even in English,” A Year of Panel Discussion—English in East Asia, The Center for East Asian and Pacific Studies, University of Illinois at Urbana-Champaign, October 21, 2005.

“A computational model of tonal variation.” *Midwest Computational Linguistics Colloquium (MCLC-2005)*. Columbus, Ohio, May 14-15, 2005.

“Disappearing Tone.” Brain and Cognitive Sciences, University of Rochester, April 4, 2005.

“Tonal effects on intonation.” *International Symposium on Tonal Aspects of Languages: Emphasis on Tone Languages*, Beijing, China, March 28-31, 2004.

“Prosody modeling: Explaining tonal variations.” University of Science and Technology of China, Hefei, Anhui, China, March 28, 2004.

“Verifying phonological hypotheses with corpus methods.” Academia Sinica, Taiwan, July 21, 2004.

“Modeling prosodic variations.” The Beckman Institute, University of Illinois at Urbana-Champaign, October 9, 2003.

“Sound conversion.” *Electronic Metastructure for Endangered Languages Data (E-MELD) Conference*, LSA Institute, Michigan State University, July 11-13, 2003.

“Intonation modeling: explaining tonal variations.” Eastern Michigan University, January 30, 2003.

“Intonation modeling: explaining tonal variations.” University of Illinois at Urbana-Champaign, April 26, 2003.

“A mathematical intonation model grown from tonal variations.” European Science Foundation 2003 Workshop *Experimental Approaches to Tone and Intonation*, University of Oxford, April 2-5, 2003.

“Prosody modeling with Stem-ML.” IBM Thomas J. Watson Research Center, Yorktown Heights, NY, November 19, 2002.

- “Tonal variations and prosodic strength.” *Linguistics and Phonetics 2002*, Meikai University, Japan, September 2-6, 2002.
- “The intonation of asking for confirmation.” Advanced Telecommunications Research Institute International (ATR), Japan. September 6, 2002.
- “A constraint-based prosodic model of Mandarin Chinese.” City University of Hong Kong, April, 2002.
- “Stem-ML: An articulatory-based prosodic model.” Cornell University, October 15, 2001.
- “Modeling intonation variations.” AT&T Shannon Laboratory, Florham Park, NJ, November 30, 2000.
- “Chinese tone modeling for a text-to-speech system.” State University of New York at Stony Brook, 2000.
- “Tonal variations in connected speech.” *Tone, Stress and Rhythm in Spoken Chinese*, Institute of East Asian Studies, Charles University, Prague, May 6-9, 1999.
- “Prosodic modeling for text-to-speech systems.” Dragon Systems, Boston, 1999.
- “Analysis and modeling of Mandarin prosody.” National University of Singapore, July 1997.
- “Prosodic modeling for text-to-speech systems.” Intel China, Beijing, November 1997.
- “Intonation modeling for Mandarin Chinese.” National Taiwan University, Taipei, August 21, 1997.
- “A corpus-based Mandarin duration study.” University of Pennsylvania, November 1994.