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Education

1994	Ph.D.	(Computer Science) University of California at Berkeley Dissertation: <i>Bayesian Learning of Probabilistic Language Models</i>
1988	Diplom	(Computer Science) Technische Universität, Munich, Germany

Research Experience

2000–present	Senior Visiting Researcher, International Computer Science Institute, Berkeley, CA
1994–present	Senior Research Engineer, Speech Technology and Research Laboratory, SRI International, Menlo Park, CA
Summer 1996	Project Lead, <i>Dependency Language Modeling</i> , Workshop on Innovative Techniques in Speech Recognition, Johns Hopkins University
1994	Post-Doctoral Researcher, International Computer Science Institute, Berkeley, CA

Research Interests

Machine learning and probabilistic modeling for natural language processing, speech recognition, and speaker recognition. Special interests: language modeling, pronunciation and prosody modeling, speaker modeling, multi-party dialog, grammar induction, efficient algorithms and model combination.

Editorial Service

2003–present Co-Editor, *Computer Speech and Language*
2000–2002 Associate Editor, *IEEE Transactions on Speech and Audio Processing*
1997–1999 Editorial Board, *Computational Linguistics*
1996–1997 Editorial Board, *Free Speech Journal*
Reviewer for the above journals, as well as *Machine Learning*, *Language and Speech*, *Journal of AI Research*,
ACL and NAACL conferences, 1995 Machine Learning Conference

Representative Publications

1. W. Wang, A. Stolcke, & M. P. Harper (2004), The Use of a Linguistically Motivated Language Model in Conversational Speech Recognition. *Proc. IEEE Intl. Conf. on Acoustics, Speech and Signal Processing*, vol. 1, pp. 261–264, Montreal.
2. A. Stolcke, C. Wooters, N. Mirghafori, et al. (2004), Progress in Meeting Recognition: The ICSI-SRI-UW Spring 2004 Evaluation System. *Proc. NIST ICASSP 2004 Meeting Recognition Workshop*, Montreal.

3. S. Kajarekar, L. Ferrer, A. Venkataraman, K. Sonmez, E. Shriberg, A. Stolcke, & R. R. Gadde (2003), Speaker Recognition using Prosodic and Lexical Features. *Proc. IEEE Speech Recognition and Understanding Workshop*, pp. 1924, St. Thomas, U.S. Virgin Islands.
4. D. Vergyri, A. Stolcke, V. R. R. Gadde, L. Ferrer, & E. Shriberg (2003), Prosodic Knowledge Sources for Automatic Speech Recognition. *Proc. IEEE Intl. Conf. on Acoustics, Speech and Signal Processing*, vol. 1, pp. 208211, Hong Kong.
5. V. R. Rao Gadde, A. Stolcke, D. Vergyri, J. Zheng, K. Sonmez, & A. Venkataraman (2002), Building an ASR System for Noisy Environments: SRI's 2001 SPINE Evaluation System. *Proc. Intl. Conf. on Spoken Language Processing*, vol. 3, pp. 1577–1580, Denver.
6. A. Stolcke (2002), SRILM—An Extensible Language Modeling Toolkit. *Proc. Intl. Conf. on Spoken Language Processing*, vol. 2, pp. 901–904, Denver.
7. G. Tur, D. Hakkani-Tur, A. Stolcke, & E. Shriberg (2001), Integrating Prosodic and Lexical Cues for Automatic Topic Segmentation, *Computational Linguistics* 27(1), 31–57.
8. L. Mangu, E. Brill, & A. Stolcke (2000), Finding consensus in speech recognition: word error minimization and other applications of confusion networks, *Computer Speech and Language* 14(4), 373–400.
9. E. Shriberg, A. Stolcke, D. Hakkani-Tur, & G. Tur (2000), Prosody-Based Automatic Segmentation of Speech into Sentences and Topics, *Speech Communication* 32(1–2), 127–154.
10. A. Stolcke, K. Ries, N. Coccaro, E. Shriberg, R. Bates, D. Jurafsky, P. Taylor, R. Martin, C. Van Ess-Dykema, & M. Meteer (2000), Dialogue Act Modeling for Automatic Tagging and Recognition of Conversational Speech, *Computational Linguistics* 26(3), 339–373.
11. A. Stolcke (1998), Entropy-based Pruning of Backoff Language Models. *Proc. DARPA Broadcast News Transcription and Understanding Workshop*, pp. 270–274, Lansdowne, VA.
12. A. Stolcke (1995), An Efficient Probabilistic Context-Free Parsing Algorithm that Computes Prefix Probabilities. *Computational Linguistics* 21(2), 165–201.
13. A. Stolcke & S. Omohundro (1994), Inducing Probabilistic Grammars by Bayesian Model Merging. In *Grammatical Inference and Applications*, R. C. Carrasco & J. Oncina (eds.), Springer, pp. 106–118.
14. C. Wooters & A. Stolcke (1994), Multiple-Pronunciation Lexical Modeling in a Speaker-Independent Speech Understanding System. *Proc. Intl. Conf. on Spoken Language Processing*, 1363–1366, Yokohama.
15. A. Stolcke & J. Segal (1994), Precise N-gram Probabilities from Stochastic Context-free Grammars. *Proc. ACL*, pp. 74–79, Las Cruces, NM.

Professional Honors and Memberships

2003	<i>Computer Speech and Language</i> Paper Award (with L. Mangu and E. Brill)
1989-1992	IBM Graduate Fellowship
Since 2000	Senior Member, IEEE Signal Processing Society
Since 1992	Member, Association for Computational Linguistics