Amanda Stent | Curriculum Vitae

10 Meadow Rd - Chatham, NJ 07928 - USA

Education

University of Rochester
PhD, Computer Science
Advisor: James F. Allen
Houghton College

BA, Mathematics and Music

Summa cum laude

University of Edinburgh

Rochester, NY

1996–2001

Houghton, NY 1992–1996

Edinburgh, UK 1994–1995

Experience

Bloomberg L.P.

Team Lead, People and Language AI, Chief Technology Office

New York, NY

Aug. 2020-present

 Manage a team of technical architects responsible for Bloomberg infrastructure across human computation, ontologies, recommender systems

Bloomberg L.P.

NLP Architect, Chief Technology Office

New York, NY

Aug. 2016-present

- Responsible for consistency of natural language processing work across the company
- Technical product manager for Bloomberg's natural language processing platforms
- Develop new NLP-driven enterprise products
- Develop and teach natural language processing courses for Bloomberg engineers and data scientists
- Make presentations to technical, business and government audiences

Yahoo Labs New York, NY

Principal Research Scientist and Research Director

Sep. 2013-Jul. 2016

- Managed a group of researchers working on summarization, discourse, multilingual NLP and dialog
- Managed a group of researchers working on image and video processing
- Managed and mentored two graduate student interns; hosted two sabbatical visitors
- Conducted applied research on summarization, discourse processing and "core" NLP
- Provided technical guidance to business on applications of spoken language processing and NLP
- Made numerous invited presentations to technical, business and government audiences

AT&T Labs-Research

Florham Park, NJ

Aug. 2007-Sep. 2013

Principal Member of Technical Staff

- Conducted applied research on dialog systems, interactive data exploration and assistive technology
- Conducted basic research on natural language generation, natural language understanding and dialog modeling
- Managed and mentored three graduate student interns; hosted one sabbatical visitor
- Made numerous invited presentations to technical, business and government audiences

Stony Brook University

Associate Professor, Computer Science

Stony Brook University

Assistant Professor, Computer Science Secondary appointment in Psychology Stony Brook, NY
Jan. 2008–Aug. 2009
Stony Brook NY

- Stony Brook, NY Jan. 2002-Jan. 2008
- o Founded and led a natural language processing research group; managed 6-9 student researchers annually
- Brought in over \$4.5 million in competitive national research funding
- Created an interdisciplinary computational linguistics graduate program; designed and taught new graduate courses in speech processing, natural language processing, dialog systems and information retrieval
- Designed new undergraduate course in software engineering ethics; taught across the curriculum from theory of computation to software engineering
- Supervised or co-supervised five PhD students; supervised sixteen MS student research projects and four undergraduate honors theses

AT&T Research
Consultant/Post-doctoral researcher

University of Rochester *Research assistant, Computer Science*

Eastman Kodak

Intern
SRI International

Intern

Florham Park, NJ

Jul. 2001–Jan. 2002

Rochester, NY Jun. 1996-Jul. 2001

Rochester, NY

Jun. 2000-Dec. 2000

Palo Alto, CA

Jun. 1998-Aug. 1998

Publications

Books

- [1] A Stent and S Bangalore, editors. *Natural Language Generation in Interactive Systems*. Cambridge University Press, 2014.
- [2] P Lewis and A Stent. The Princess at the Keyboard. Lulu Press, 2009.

Book Chapters....

- [3] G Di Fabbrizio, AJ Stent, and R Gaizauskas. Summarizing opinion-related information for mobile devices. In A Neustein and J Markowitz, editors, *Mobile Speech and Advanced Natural Language Solutions*, pages 289–317. Springer, 2013.
- [4] AJ Stent. Computational linguistics. In W O'Grady, J Archibald, M Aronoff, and J Rees-Miller, editors, *Contemporary Linguistics: An Introduction*. St. Martin's, 5 edition, 2005. (Also 6th edition, 2009).

Journal Articles

- [5] Y Borodin, V Polishchuk, J Mahmud, IV Ramakrishnan, and A Stent. Live and learn from mistakes: A lightweight system for document classification. *Information Processing & Management*, 49(1):83–98, 2013.
- [6] S Stoyanchev and A Stent. Concept type prediction and responsive adaptation in a dialogue system. *Dialogue & Discourse*, 3(1), 2012.
- [7] A Syrdal, T Mishra, and A Stent. On the intelligibility of fast synthesized speech for people who are blind: A cross-system comparison. *The Journal of the Acoustical Society of America*, 129(4):2421–2421, 2011. (Abstract only).

- [8] RJ Gerrig, WS Horton, and A Stent. Production and comprehension of unheralded pronouns: A corpus analysis. *Discourse Processes*, 48(3):161–182, 2011.
- [9] M Molina and A Stent. A knowledge-based method for generating summaries of spatial movement in geographic areas. *International Journal on Artificial Intelligence Tools*, 19(4):393–415, 2010.
- [10] DM Napolitano and A Stent. TechWriter: an evolving system for writing assistance for advanced learners of English. *CALICO Journal*, 26(3):611–625, 2009.
- [11] AJ Stent, MK Huffman, and SE Brennan. Adapting speaking after evidence of misrecognition: Local and global hyperarticulation. *Speech Communication*, 50(3):163–178, 2008.
- [12] S Bangalore, G Di Fabbrizio, and A Stent. Learning the structure of task-driven human-human dialogs. *IEEE Transactions on Audio, Speech, and Language Processing*, 16(7):1249–1259, 2008.
- [13] MA Walker, A Stent, F Mairesse, and R Prasad. Individual and domain adaptation in sentence planning for dialogue. *Journal of Artificial Intelligence Research*, 30:413–456, 2007.
- [14] MA Walker, SJ Whittaker, A Stent, P Maloor, J Moore, M Johnston, and G Vasireddy. Generation and evaluation of user tailored responses in multimodal dialogue. *Cognitive Science*, 28(5):811–840, 2004.
- [15] AJ Stent. A conversation acts model for generating spoken dialogue contributions. Computer Speech & Language, 16(3-4):313-352, 2002.
- [16] JF Allen, DK Byron, M Dzikovska, G Ferguson, L Galescu, and A Stent. Toward conversational human-computer interaction. *Al Magazine*, 22(4):27–27, 2001.
- [17] J Allen, D Byron, M Dzikovska, G Ferguson, L Galescu, and A Stent. An architecture for a generic dialogue shell. *Natural Language Engineering*, 6(3–4):213–228, 2000.

Conference/Workshop Papers....

- [18] S Uppal, V Gupta, A Swaminathan, H Zhang, D Mahata, R Gosangi, RR Shah, and A Stent. Two-step classification using recasted data for low resource settings. In *Proceedings of the 1st Conference of the Asia-Pacific Chapter of the Association for Computational Linguistics and the 10th International Joint Conference on Natural Language Processing*, 2020.
- [19] A Swaminathan, H Zhang, D Mahata, R Gosangi, RR Shah, and A Stent. A preliminary exploration of GANs for keyphrase generation. In *Proceedings of the 2020 Conference on Empirical Methods in Natural Language Processing (EMNLP)*, 2020.
- [20] D Sahrawat, D Mahata, H Zhang, M Kulkarni, A Sharma, R Gosangi, A Stent, Y Kumar, RR Shah, and R Zimmermann. Keyphrase extraction as sequence labeling using contextualized embeddings. In *Proceedings* of the European Conference on Information Retrieval, 2020.
- [21] Y Kumar, S Maheshwari, D Sahrawat, P Jhanwar, V Chaudhary, D Mahata, A Stent, A Kambadur, and RR Shah. Harnessing GANs for zero-shot learning of new classes in visual speech recognition. In *Proceedings* of the Annual Meeting of the Association for the Advancement of Artificial Intelligence, 2020.
- [22] S Dhanwal, H Dutta, H Nankani, N Shrivastava, Y Kumar, JJ Li, D Mahata, R Gosangi, H Zhang, RR Shah, and A Stent. An annotated dataset of discourse modes in Hindi stories. In *Proceedings of the 12th Language Resources and Evaluation Conference*, 2020.
- [23] R Zhao, Y Deng, M Dredze, A Verma, D Rosenberg, and A Stent. Visual attention model for cross-sectional stock return prediction and end-to-end multimodal market representation learning. In *Proceedings of the Florida AI Research Symposium*, 2019. arXiv preprint arXiv:1809.

- [24] S Uttam, Y Kumar, D Sahrawat, M Aggarwal, RR Shah, D Mahata, and A Stent. Hush-Hush Speak: Speech reconstruction using silent videos. In *Proceedings of the Annual Conference of the International Speech Communication Association*, 2019.
- [25] N Shrivastava, A Saxena, Y Kumar, RR Shah, D Mahata, A Stent, P Kaur, and R Zimmerman. MobiVSR: A visual speech recognition solution for mobile devices. In *Proceedings of the Annual Conference of the International Speech Communication Association*, 2019. arXiv preprint arXiv:1905.03968.
- [26] P Patil, K Myer, R Zala, A Singh, S Mysore, A McCallum, A Benton, and A Stent. Roll call vote prediction with knowledge augmented models. In *Proceedings of the Conference on Natural Language Learning*, 2019.
- [27] KA Keith and A Stent. Modeling financial analysts' decision making via the pragmatics and semantics of earnings calls. In *Proceedings of the Annual Meeting of the Association for Computational Linguistics*, 2019. arXiv preprint arXiv:1906.
- [28] A Pappu, R Blanco, Y Mehdad, A Stent, and K Thadani. Lightweight multilingual entity extraction and linking. In *Proceedings of the ACM International Conference on Web Search and Data Mining*, 2017.
- [29] WY Wang, Y Mehdad, DR Radev, and A Stent. A low-rank approximation approach to learning joint embeddings of news stories and images for timeline summarization. In *Proceedings of the Conference of the North American Chapter of the Association for Computational Linguistics*, 2016.
- [30] S Stoyanchev, A Stent, and S Bangalore. Evaluation of semantic dependency labeling across domains. In *Proceedings of the AAAI Conference on Artificial Intelligence*, 2016.
- [31] Y Mehdad, A Stent, K Thadani, D Radev, Y Billawala, and K Buchner. Extractive summarization under strict length constraints. In *Proceedings of the International Language Resources and Evaluation Conference*, 2016.
- [32] JJ Li, K Thadani, and A Stent. The role of discourse units in near-extractive summarization. In *Proceedings* of the Annual Meeting of the Special Interest Group on Discourse and Dialogue, 2016. Best Paper Award Nominee.
- [33] S Lee and A Stent. Task lineages: Dialog state tracking for flexible interaction. In *Proceedings of the Annual Meeting of the Special Interest Group on Discourse and Dialogue*, 2016. Best Paper Award.
- [34] Y Song, J Vallmitjana, A Stent, and A Jaimes. TVSum: Summarizing web videos using titles. In *Proceedings* of the IEEE Conference on Computer Vision and Pattern Recognition, 2015.
- [35] A Pappu and A Stent. Automatic formatted transcripts for videos. In *Proceedings of the Annual Conference of the International Speech Communication Association*, 2015.
- [36] T Kasturi, H Jin, A Pappu, S Lee, B Harrison, R Murthy, and A Stent. The Cohort and Speechify libraries for rapid construction of speech enabled applications for Android. In *Proceedings of the Annual Meeting of the Special Interest Group on Discourse and Dialogue*, 2015. Demo paper.
- [37] JD Choi, J Tetreault, and A Stent. It depends: Dependency parser comparison using a web-based evaluation tool. In *Proceedings of the Annual Meeting of the Association for Computational Linguistics*, 2015.
- [38] NB Niraula, A Stent, H Jung, G Di Fabbrizio, ID Melamed, and V Rus. Forms2Dialog: Automatic dialog generation for web tasks. In *Proceedings of the IEEE Spoken Language Technology Workshop*, 2014. (With accompanying demo).
- [39] G Di Fabbrizio, A Stent, and R Gaizauskas. A hybrid approach to multi-document summarization of opinions in reviews. In *Proceedings of the International Natural Language Generation Conference*, 2014.

- [40] H Jung and A Stent. ATT1: Temporal annotation using big windows and rich syntactic and semantic features. In *Proceedings of the Joint Conference on Lexical and Computational Semantics*, 2013.
- [41] AJ Stent. After dialog went pervasive: Separating dialog behavior modeling and task modeling. In *Proceedings of the NAACL-HLT Workshop on Future Directions and Needs in the Spoken Dialog Community: Tools and Data*, 2012. Position paper.
- [42] J Lilley, A Stent, and I Zeljkovic. A random, semantically appropriate sentence generator for speaker verification. In *Proceedings of the Annual Conference of the International Speech Communication Association*, 2012.
- [43] A Stent, A Syrdal, and T Mishra. On the intelligibility of fast synthesized speech for individuals with early-onset blindness. In *Proceedings of the International ACM SIGACCESS Conference on Computers and Accessibility*, 2011.
- [44] A Stent. Shared experiences, shared representations, & the implications for applied natural language processing. In *Proceedings of the Florida AI Research Symposium*, 2011. (Paper accompanies invited talk).
- [45] A Stent. ATT-0: Submission to generation challenges 2011 surface realization: shared task. In *Proceedings* of the European Workshop on Natural Language Generation, 2011. Shared task submission.
- [46] M Molina, A Stent, and E Parodi. Generating automated news to explain the meaning of sensor data. In *Proceedings of the International Symposium on Intelligent Data Analysis*, 2011.
- [47] M Molina, E Parodi, and A Stent. Using the journalistic metaphor to design user interfaces that explain sensor data. In *Proceedings of the IFIP Conference on Human-Computer Interaction*, 2011.
- [48] G Di Fabbrizio, D Caseiro, and AJ Stent. Semantic data selection for vertical business voice search. In *Proceedings of the IEEE International Conference on Acoustics, Speech and Signal Processing*, 2011.
- [49] A Belz, M White, D Espinosa, E Kow, D Hogan, and A Stent. The first surface realisation shared task: Overview and evaluation results. In *Proceedings of the European Workshop on Natural Language Generation*, 2011.
- [50] L Barbosa, D Caseiro, GD Fabbrizio, and A Stent. SpeechForms: From web to speech and back. In *Proceedings of the Annual Conference of the International Speech Communication Association*, 2011.
- [51] AJ Stent and S Bangalore. Interaction between dialog structure and coreference resolution. In *Proceedings* of the IEEE Spoken Language Technology Workshop, 2010.
- [52] AJ Stent, S Azenkot, and B Stern. IWalk: a lightweight navigation system for low-vision users. In *Proceedings of the International ACM SIGACCESS conference on Computers and Accessibility*, 2010. Demo paper.
- [53] M Molina, E Parodi, and A Stent. Combining text and graphics for interactive exploration of behavior datasets. In *Proceedings of the IEEE International Conference on Tools with Artificial Intelligence*, 2010.
- [54] M Johnston and AJ Stent. EPG: Speech access to program guides for people with disabilities. In *Proceedings* of the International ACM SIGACCESS conference on Computers and Accessibility, 2010. Demo paper.
- [55] A Belz, M White, J Van Genabith, D Hogan, and A Stent. Finding common ground: Towards a surface realisation shared task. In *Proceedings of the International Natural Language Generation Conference*, 2010.
- [56] H Zhong and A Stent. Determining the position of adverbial phrases in English. In *Proceedings of Human Language Technologies: The Annual Conference of the North American Chapter of the Association for Computational Linguistics*, 2009.

- [57] S Stoyanchev and A Stent. Predicting concept types in user corrections in dialog. In *Proceedings of the Workshop on Semantic Representation of Spoken Language*, 2009.
- [58] S Stoyanchev and A Stent. Lexical and syntactic priming and their impact in deployed spoken dialog systems. In *Proceedings of Human Language Technologies: The Annual Conference of the North American Chapter of the Association for Computational Linguistics*, 2009.
- [59] S Stoyanchev and A Stent. Concept form adaptation in human-computer dialog. In *Proceedings of the Annual Meeting of the Special Interest Group on Discourse and Dialogue*, 2009.
- [60] S Stoyanchev and A Stent. An analysis of user behavior following speech recognition errors in the Communicator corpus. In *Proceedings of Corpus Linguistics*, 2009.
- [61] A Stent, I Zeljković, D Caseiro, and J Wilpon. Geo-centric language models for local business voice search. In *Proceedings of Human Language Technologies: The Annual Conference of the North American Chapter of the Association for Computational Linguistics*, 2009.
- [62] A Stent and M Molina. Evaluating automatic extraction of rules for sentence plan construction. In *Proceedings of the Annual Meeting of the Special Interest Group on Discourse and Dialogue*, 2009.
- [63] M Molina and A Stent. Generating descriptions that summarize geospatial and temporal data. In *Proceedings* of the IEEE International Conference on Tools with Artificial Intelligence, 2009.
- [64] M Hart, R Johnson, and A Stent. iTag: a personalized blog tagger. In *Proceedings of the ACM Conference on Recommender Systems*, 2009.
- [65] M Hart, C Castille, R Johnson, and A Stent. Usable privacy controls for blogs. In *Proceedings of the Symposium on Social Intelligence and Networking at SocialCom*, 2009.
- [66] S Bangalore and AJ Stent. Incremental parsing models for dialog task structure. In *Proceedings of the Conference of the European Chapter of the Association for Artificial Intelligence*, 2009.
- [67] AJ Stent and S Bangalore. Statistical shared plan-based dialog management. In *Proceedings of the Annual Conference of the International Speech Communication Association*, 2008.
- [68] A Stent, S Bangalore, and GD Fabbrizio. Where do the words come from? learning models for word choice and ordering from spoken dialog corpora. In *Proceedings of the IEEE International Conference on Acoustics, Speech and Signal Processing*, 2008.
- [69] D Napolitano and A Stent. TechWriter: An individualized approach to writing assistance and improvement. In *Presented at the CALICO Workshop on Automatic Analysis of Learner Language*, 2008.
- [70] G Di Fabbrizio, AJ Stent, and S Bangalore. Trainable speaker-based referring expression generation. In *Proceedings of the Conference on Computational Natural Language Learning*, 2008.
- [71] G Di Fabbrizio, AJ Stent, and S Bangalore. Referring expression generation using speaker-based attribute selection and trainable realization (ATT-REG). In *Proceedings of the International Natural Language Generation Conference*, 2008. Shared task submission.
- [72] Y Borodin, JP Bigham, A Stent, and IV Ramakrishnan. Towards one world web with HearSay3. In *Proceedings of W4A*, 2008.
- [73] A Stent. Pragmatic influences on sentence planning and surface realization: Implications for evaluation. In Proceedings of the NSF-funded Workshop on Shared Tasks and Comparative Evaluation in Natural Language Generation, 2007.

- [74] S Stenchikova and A Stent. Measuring adaptation between dialogs. In *Proceedings of the SIGdial Workshop on Discourse and Dialogue*, 2007.
- [75] S Stenchikova, B Mucha, S Hoffman, and A Stent. Ravencalendar: A multimodal dialog system for managing a personal calendar. In *Proceedings of Human Language Technologies: The Annual Conference of the North American Chapter of the Association for Computational Linguistics*, 2007. Demo paper.
- [76] M Hart, R Johnson, and A Stent. More content-less control: Access control in the web 2.0. In *Proceedings* of the Workshop on Web 2.0 Security and Privacy at the IEEE Symposium on Security and Privacy, 2007.
- [77] H Guo, J Mahmud, Y Borodin, A Stent, and I Ramakrishnan. A general approach for partitioning web page content based on geometric and style information. In *Proceedings of the International Conference on Document Analysis and Recognition*, 2007.
- [78] Y Borodin, J Mahmud, IV Ramakrishnan, and A Stent. The HearSay non-visual web browser. In *Proceedings of W4A*, 2007. Winner, Delegates' Award.
- [79] H Zhong, A Stent, and M Swift. Modeling the dative alternation with automatically extracted features. In *Proceedings of the the Workshop on Statistical and Empirical Approaches for Spoken Dialog Systems at AAAI*, 2006.
- [80] Z Sun, A Stent, and IV Ramakrishnan. Dialog generation for voice browsing. In *Proceedings of the International Cross-Disciplinary Workshop on Web Accessibility at W4A*, 2006.
- [81] A Stent, S Stenchikova, and M Marge. Dialog systems for surveys: The Rate-a-Course system. In *Proceedings of the IEEE Spoken Language Technology Workshop*, 2006.
- [82] H Guo and A Stent. Taxonomy based data extraction from multi-item web pages. In *Proceedings of the Workshop on Web Content Mining with Human Language Technologies at ISWC*, 2006.
- [83] RJ Gerrig, WS Horton, and A Stent. Unheralded pronouns and theories of pronoun resolution. In *Presented at the Annual Meeting of the Society for Text and Discourse*, 2006.
- [84] S Bangalore, G Di Fabbrizio, and A Stent. Learning the structure of task-driven human-human dialogs. Proceedings of the International Conference on Computational Linguistics and Annual Meeting of the Association for Computational Linguistics, 2006.
- [85] S Bangalore, G Di Fabbrizio, and A Stent. Towards learning to converse: Structuring task-oriented humanhuman dialogs. In *Proceedings of the International Conference on Acoustic, Speech and Signal Processing*, 2006.
- [86] H Zhong and A Stent. Building surface realizers automatically from corpora. In *Proceedings of the Workshop on Using Corpora in Natural Language Generation*, 2005.
- [87] A Stent, M Marge, and M Singhai. Evaluating evaluation methods for generation in the presence of variation. In *Proceedings of the International Conference on Intelligent Text Processing and Computational Linguistics*, 2005.
- [88] A Stent and H Guo. A new data-driven approach for multimedia presentation planning. In *Proceedings of EuroIMSA*, 2005.
- [89] S Gupta and A Stent. Automatic evaluation of referring expression generation using corpora. *Proceedings of the Workshop on Using Corpora for Natural Language Generation*, 2005.

- [90] J Allen, G Ferguson, A Stent, S Stoness, M Swift, L Galescu, N Chambers, E Campana, and G Aist. Two diverse systems built using generic components for spoken dialogue (recent progress on TRIPS). In *Proceedings of the Annual Meeting of the Association for Computational Linguistics*, 2005. Demo paper.
- [91] A Stent, R Prasad, and M Walker. Trainable sentence planning for complex information presentation in spoken dialog systems. In *Proceedings of the Annual Meeting of the Association for Computational Linguistics*, 2004.
- [92] IV Ramakrishnan, A Stent, and G Yang. HearSay: enabling audio browsing on hypertext content. In *Proceedings of the International Conference on the World Wide Web*, 2004.
- [93] M Walker, R Prasad, and A Stent. A trainable generator for recommendations in multimodal dialog. In *Proceedings of the European Conference on Speech Communication and Technology*, 2003.
- [94] MA Walker, S Whittaker, A Stent, P Maloor, JD Moore, M Johnston, and G Vasireddy. Speech-plans: Generating evaluative responses in spoken dialogue. In *Proceedings of the International Natural Language Generation Conference*, 2002.
- [95] A Stent, MA Walker, S Whittaker, and P Maloor. User-tailored generation for spoken dialogue: An experiment. In *Proceedings of the International Conference on Spoken Language Processing*, 2002.
- [96] M Johnston, S Bangalore, G Vasireddy, A Stent, P Ehlen, M Walker, et al. MATCH: An architecture for multimodal dialogue systems. In *Proceedings of the Annual Meeting on Association for Computational Linguistics*, 2002.
- [97] M Johnston, S Bangalore, A Stent, G Vasireddy, and P Ehlen. Multimodal language processing for mobile information access. In *Proceedings of the International Conference on Spoken Language Processing*, 2002.
- [98] A Stent and A Loui. Using event segmentation to improve indexing of consumer photographs. In *Proceedings* of the International ACM SIGIR Conference on Research and Development in Information Retrieval, 2001.
- [99] J Allen, G Ferguson, and A Stent. An architecture for more realistic conversational systems. In *Proceedings* of the International Conference on Intelligent User Interfaces, 2001.
- [100] A Stent. Rhetorical structure in dialog. In *Proceedings of the International Conference on Natural Language Generation*, 2000.
- [101] J Allen, D Byron, D Costello, M Dzikovska, G Ferguson, L Galescu, and A Stent. TRIPS-911 system demonstration. In *Proceedings of the ANLP-NAACL 2000 Workshop: Conversational Systems*, 2000. Demo paper.
- [102] A Stent, J Dowding, JM Gawron, EO Bratt, and R Moore. The commandtalk spoken dialogue system. In *Proceedings of the Annual Meeting of the Association for Computational Linguistics*, 1999.
- [103] A Stent. Content planning and generation in continuous-speech spoken dialog systems. In *Proceedings of KI'99 Workshop "May I Speak Freely"*, 1999.
- [104] D Byron and A Stent. A preliminary model of centering in dialog. In *Proceedings of the Annual Meeting of the Association for Computational Linguistics*, 1998.

T '		
Lachnica	I Reports.	
I CCIIIIICa		

[105] A Stent. Aspects of natural language generation. Technical Report TR701, CS Department, University of Rochester, 1998.

- [106] A Stent. The Monroe corpus. Technical Report TR728 and TN99-2, CS Department, University of Rochester, 2000.
- [107] A Stent and J Allen. Annotating argumentation acts in spoken dialog. Technical Report Technical Report 740 and Technical Note 00-1, CS Department, University of Rochester, 2000.
- [108] A Stent and D Byron. A preliminary model of centering in dialog. Technical Report TR687, CS Department, University of Rochester, 1998.
- [109] AJ Stent and JF Allen. TRAINS-96 system evaluation. Technical Report TRAINS TN 97-1, CS Department, University of Rochester, 1997.

Patents

- [110] BJ Stern, MC Beutnagel, AD Conkie, HJ Schroeter, and AJ Stent. System and method for distributed voice models across cloud and device for embedded text-to-speech, June 2020. US Patent 10,699,694.
- [111] A Stent and S Bangalore. System and method for dialog modeling, June 2020. US Patent 10,672,381.
- [112] Y Song, J Vallmitjana, A Stent, and A Jaimes. Topical based media content summarization system and method, September 2020. US Patent 10,769,208.
- [113] A Pappu and A Stent. Location-based recommendations using nearest neighbors in a locality sensitive hashing (lsh) index, December 2020. US Patent 10,521,412.
- [114] A Pappu, S Lee, J Tetreault, and A Stent. Fact machine for user generated content, September 2020. US Patent 10.789,310.
- [115] Y Mehdad, A Pappu, and A Stent. Scalable multilingual named-entity recognition, June 2020. US Patent 10,699,077.
- [116] S Lee and A Stent. Method and system for facilitating a guided dialog between a user and a conversational agent, June 2020. US Patent 10,672,397.
- [117] M Chandrasekharan, K Horiguchi, AJ Stent, RA Baeza-Yates, J Kuwano, T Achint Oommen, and Y Chang. Audio verification, December 2020. US Patent 10,855,676.
- [118] Y Billawala, Y Mehdad, D Radev, A Stent, and K Thadani. Scalable and effective document summarization framework, October 2020. US Patent 10,810,242.
- [119] A Pappu and A Stent. Computerized system and method for formatted transcription of multimedia content, June 2019. US Patent 10,332,506.
- [120] S Lee and A Stent. Method and system for facilitating a guided dialog between a user and a conversational agent, September 2019. US Patent 10,403,273.
- [121] M Chandrasekharan, K Horiguchi, AJ Stent, RA Baeza-Yates, J Kuwano, T Achint Oommen, and Y Chang. Audio verification, April 2019. US Patent 10,277,581.
- [122] Y Billawala, Y Mehdad, D Radev, A Stent, and K Thadani. Scalable and effective document summarization framework, April 2019. US Patent 10,255,356.
- [123] I Zeljkovic, T Mishra, A Stent, AK Syrdal, and J Wilpon. System and method for generating challenge utterances for speaker verification, November 2018. US Patent 10,121,476.

- [124] BJ Stern, MC Beutnagel, AD Conkie, HJ Schroeter, and AJ Stent. System and method for distributed voice models across cloud and device for embedded text-to-speech, November 2018. US Patent 10,134,383.
- [125] A Stent and S Bangalore. System and method for dialog modeling, May 2018. US Patent 9,972,307.
- [126] Y Song, J Vallmitjana, A Stent, and A Jaimes. Topical based media content summarization system and method, October 2018. US Patent 10,095,786.
- [127] Y Billawala, Y Mehdad, D Radev, A Stent, and K Thadani. Scalable and effective document summarization framework, August 2018. US Patent 10,042,924.
- [128] I Zeljkovic, RJ Andres, J Birkes, AW Drake II, JA Garay, BM Novack, AJ Stent, G Toretti, J Wilpon, and J Whitescarver. Authentication techniques utilizing a computing device, June 2017. US Patent 9,692,758.
- [129] BJ Stern, MC Beutnagel, AD Conkie, HJ Schroeter, and AJ Stent. System and method for distributed voice models across cloud and device for embedded text-to-speech, September 2017. US Patent 9,761,218.
- [130] AJ Stent, H Jung, ID Melamed, and NB Niraula. Voice-enabled dialog interaction with web pages, June 2017. US Patent 9,690,854.
- [131] JP Ruckart, G Di Fabbrizio, and AJ Stent. Managing vendor inventory information and shopping navigation routes based upon shopping list contents, November 2017. US Patent 9,830,638.
- [132] I Zeljkovic, T Mishra, A Stent, AK Syrdal, and J Wilpon. System and method for generating challenge utterances for speaker verification, April 2016. US Patent 9,318,114.
- [133] G Di Fabbrizio and AJ Stent. Hybrid review synthesis, November 2016. US Patent 9,483,730.
- [134] BJ Stern, MC Beutnagel, AD Conkie, HJ Schroeter, and AJ Stent. System and method for distributed voice models across cloud and device for embedded text-to-speech, December 2015. US Patent 9,218,804, 10,699,694.
- [135] A Stent and S Bangalore. System and method for dialog modeling, September 2015. US Patent 9,129,601.
- [136] BM Novack, RJ Andres, J Birkes, J Whitescarver, AW Drake II, G Toretti, I Zeljkovic, J Wilpon, JA Garay, and AJ Stent. Authentication techniques utilizing a computing device, April 2015. US Patent 9,021,565.
- [137] S Bangalore, A Conkie, G Di Fabbrizio, NK Gupta, and AJ Stent. Copying human interactions through learning and discovery, March 2015. US Patent 8,990,126.
- [138] G Di Fabbrizio, S Bangalore, and A Stent. System and method for referring to entities in a discourse domain, October 2013. US Patent 8,566,090.
- [139] A Stent, D Caseiro, I Zeljkovic, and J Wilpon. Systems and methods for creating and using geo-centric language models, August 2012. US Patent 8,255,217.
- [140] G Di Fabbrizio, S Bangalore, and A Stent. System and method for referring to entities in a discourse domain, May 2012. US Patent 8,175,873.
- [141] AC Loui and AJ Stent. Method and system for segmenting and identifying events in images using spoken annotations, October 2006. US Patent 7,120,586.
- [142] AC Loui and AJ Stent. Method and system for segmenting and identifying events in images using spoken annotations, October 2004. US Patent 6,810,146.

Unpublished

[143] Tina Tseng, Amanda Stent, and Domenic Maida. Best practices for managing data annotation projects. 09 2020.

- [144] Aradhya Neeraj Mathur, Devansh Batra, Yaman Kumar, Rajiv Ratn Shah, Roger Zimmermann, and Amanda Stent. LIFI: Towards linguistically informed frame interpolation. *arXiv preprint arXiv:2010.16078*, 2020.
- [145] D Radev, A Stent, J Tetreault, A Pappu, A Iliakopoulou, A Chanfreau, P de Juan, J Vallmitjana, A Jaimes, R Jha, and B Mankoff. Humor in collective discourse: Unsupervised funniness detection in the New Yorker cartoon caption contest. arXiv preprint arXiv:1506., 2015.
- [146] AJ Stent. Dialogue systems as conversational partners: applying conversation acts theory to natural language generation for task-oriented mixed-initiative spoken dialogue. PhD Thesis, 2001.
- [147] AJ Stent. Content planning for multi-modal, mixed-initiative task-oriented dialog. Thesis proposal, 1999.

Recent Invited Talks

The computational linguistics of conversation modeling

COLING, December 9, 2020

https://screencast-o-matic.com/watch/cYXOVcLKsX?sf133754525=1

Dialogue and finance

KDD 2020 Workshop on Conversational Systems Towards Mainstream Adoption, August 24, 2020 joint talk with Camilo Ortiz

Dialogue and finance

Young Researchers' Roundtable on Spoken Dialogue Systems, June 30, 2020 joint talk with Camilo Ortiz

NLP for natural documents

University of Massachusetts Amherst, March 5, 2020

Text analytics in finance

Machine Learning in Finance 2019, May 17, 2019

Machine learning for structured and unstructured data in finance

New England Statistics Symposium, May 16, 2019 joint talk with David Rosenberg

Whose data?

Ethics in NLP Workshop at NAACL HLT 2018, June 5, 2018

Al for unstructured data in finance

Canadian AI 2018, May 11, 2018

AI, society, and you

Women of Silicon Valley, May 2, 2018

Text analytics in finance: A case study and some considerations

University of Maryland College Park, November 15, 2017

Text analytics in finance: A case study and some considerations

Johns Hopkins University, CSLP, October 17, 2017

Machine learning from conversational speech

The National Academies, August 9, 2017

State tracking for multi-task conversational agents

The College of New Jersey, October 18, 2016

State tracking for multi-task conversational agents

University of Michigan, September 27, 2016

Uphill battles in task modeling and grounding for dialog

EMNLP Workshop on Uphill Battles in NLP, November 5, 2016

Multilingual named entity identification at scale

ACM-W New York Celebration of Women in Computing, April 9, 2016

Two methods for easing video consumption

Georgia Tech, November 12, 2015

Two methods for easing video consumption

Emory University, November 11, 2015

Summarization under tight bounds for the web

Carnegie Mellon University, LTI, September 25, 2015

Computational approaches to the production of referring expressions: Dialog changes (almost) everything Pre-CogSci Workshop, June 20, 2011

Shared experiences, shared representations, and the implications for applied natural language processing FLAIRS 2011, May 18, 2011

Service

Natural Language Processing Research Community.....

2021-: Inaugural Co-Editor in Chief, ACL Rolling Review

2009-2021: Rotating Editor, Dialogue & Discourse

2003-2005: Member Editorial Board, Computational Linguistics

2008-2021: Web admin, SIGdial

2016-2020: Member Executive Committee, SIGGEN

2017-2019: President Emeritus, SIGdial

2013-2017: President, SIGdial

2008-2012: Vice President, SIGdial

2019: Board member, New York Academy of Sciences NLP, Dialog and Speech Symposium (NYAS NDS)

2019: Co-Organizer, Dagstuhl Seminar on Multi-Document Information Consolidation

2019: Co-Organizer, the Natural Legal Language Processing Workshop at HLT-NAACL 2019

2018: Co-Organizer, the KDD 2018 Data Science, Journalism & Media Workshop

2017: Co-Organizer, the KDD 2017 Data Science + Journalism Workshop

2014: Co-Organizer, the Workshop on Dialog in Motion at EACL 2014

2020: Workshop Co-Chair, AKBC

2019: Senior Area Chair, EMNLP

2019: Area Chair, CoNLL

2018: Program Co-Chair, HLT-NAACL

2013: Area Chair, EMNLP

2013: Senior Program Committee Member, ACL

2012: Program Co-Chair, SIGDIAL Conference

2011: Area Chair, SemDial

2011: Co-Organizer, First Surface Realisation Challenge

2011: Special Session Co-Chair, INTERSPEECH

2010: Senior Program Committee Member, NAACL

2006: Senior Progam Committee Member, HLT-NAACL

2007: Demo Session Co-Chair, HLT-NAACL

2004: Faculty Co-Advisor to the Student Research Workshop, HLT-NAACL

Regularly serve as a program committee member for conferences including ACL, COLING, EACL, EMNLP, INLG, INTERSPEECH. HLT-NAACL, SEMDIAL, SIGDIAL. Occasionally serve as a program committee member for conferences including AAAI, CogSci, ICASSP, IJCAI, IUI.

Ad hoc reviewer for journals including the Artificial Intelligence Journal, Copmputational Intelligence, Computational Linguistics, Computer Speech and Language, Cognitive Science, Discourse Processes, IEEE Transactions on Knowledge and Data Engineering, Information Retrieval, the Journal of Natural Language Engineering, the Journal of Pragmatics.

Computer Science.

2020-: Committee member, National Academics Committee on Responsible Computing Research

2014-: ABET Program Evaluator

2021 -: ABET Commissioner

2013-: Board member, Computing Research Association subcommittee on Widening Participation in computing research (CRA-WP, formerly CRA-W)

October 2021-: Co-Chair, Computing Research Association subcommittee on Widening Participation in computing research (CRA-WP, formerly CRA-W)

Regularly serve as panelist at CRA-WP grad cohort and career mentoring workshops.

Regular National Science Foundation Panelist.

Member of the ACL, the ACM, IEEE and SIGdial.

Other

2013-: EMT, Chatham Emergency Squad

Awards and Honors

2019: Data Science Professional of the Year, Waters in Tech and Data Science

2013: Senior Member, ACM

2012: Senior Member, IEEE

2004: Undergraduate teaching award, Stony Brook University

1996: Pi Kappa Lambda, Houghton College

Teaching

Natural Language Processing

Bloomberg L.P.

Winter 2017, Winter 2018, Winter 2019

CES302: Professional Ethics for Computer Science Stony Brook University Fall 2005, Fall 2006 **CES303: Introduction to Theory of Computing Stony Brook University** Fall 2004, Fall 2006 **CES308: Software Engineering Stony Brook University** Fall 2005 **CES333:** User Interface Development Stony Brook University Fall 2002 CES352: Artificial Intelligence **Stony Brook University** Fall 2007 CES393: Special Topics in Computer Science: NLP Stony Brook University Spring 2004 CES507/LIN650: Introduction to Computational Linguistics **Stony Brook University** Spring 2002, Fall 2003, Spring 2006 **CES542: Speech Processing** Stony Brook University Spring 2003, Spring 2005, Spring 2007 CES646/CES656: Seminar in Artificial Intelligence Stony Brook University Each Semester 2002-2007 CSE656/PSY610.49: Computational and Empirical Approaches to Discourse Stony Brook University , Language, Mind and Brain Seminar, co-taught with Prof. Susan Brennan Fall 2002 CES691: Information Retrieval and Information Extraction from the Web **Stony Brook University** Fall 2007 **Federal Funding** (DARPA) CALO PI at Stony Brook University: Amanda Stent 2002-2004 (NSF) ITR: Adaptive Spoken Dialog with Human and Computer Partners \$1,524,000 2003-2008 Pls: Susan Brennan, Arthur Samuel, Richard Gerrig, Marie Huffman, Amanda Stent (NSF) Workshop: Student Research in Computational Linguistics, at HLT/NAACL 2004 \$20,164 Pls: Eric Fosler-Lussier, Lisa Ballesteros, Amanda Stent 2004-2005 (NSF) Content-Driven Techniques for Non-Visual Web Access \$550,623 Pls: IV Ramakrishnan, Michael Kifer, Susan Brennan, Amanda Stent 2005-2010 (NSF) Content-Based Access Control for Blogs and Social Networks \$448,607 Pls: Amanda Stent, Rob Johnson 2007-2010 (NSF) CRI: IAD - Web Accessibility Laboratory \$126,422 Pls: IV Ramakrishnan, Amanda Stent, Yevgen Borodin 2008-2012 (NSF) HCC-Large: Using the internet without using the eyes \$1,623,540 Pls: IV Ramakrishnan, Susan Brennan, Amanda Stent, Yevgen Borodin 2008-2014 Students and Interns At Stony Brook University.....

PhD students supervised: Zan Sun (PhD 2006); Hui Guo (PhD 2007); Huayan Zhong (PhD 2009); Svetlana Stenchikova (PhD 2009); Yevgen Borodin (PhD 2009). MS students: Seventeen MS projects and three MS

14/15

theses supervised.

Undergraduate honors: Four undergraduate honors theses supervised.

Since Stony Brook University....

External member, thesis committees: Jalal Mahmud (Stony Brook University, PhD 2008); Agustin Gravano (Columbia, PhD 2010); Ming Sun (CMU, PhD 2016); Ran Zhao (CMU, PhD 2019); Elisa Ferracane (UT Austin, PhD 2020); Samiha Samrose (Rochester).

Summer interns: Shiri Azenkot (University of Washington, summer 2009); Enrique Parodi (Universidad Politecnica de Madrid, summer 2019); Nobal Niraula (University at Memphis, summer 2012, 2013); William Yang Wang (CMU, summer 2015); Junyi Jessy Li (University of Pennsylvania, summer 2016); Ran Zhao (CMU, summer 2017); Katherine Keith (University of Massachusetts Amherst, summer 2018); Yuval Pinter (Georgia Tech, summer 2019, summer 2020).