NIGEL WARD

6640 El Parque El Paso, Texas 79912 nigelward@acm.org http://nigelward.com/ Department of Computer Science University of Texas at El Paso El Paso, Texas 79968-1518 +1 (915) 747-6827

Research Areas

Spoken Dialog, Prosody, Computer-Mediated Communication, Cross-Cultural Communication, Turn-Taking and Coordination, User State Modeling, Teaching and Learning Applications, Modeling Communication Disorders, Human-Computer Interaction.

Employment

2002 – present. **University of Texas at El Paso**, Computer Science Department, Professor 2010 – present, Chair 2011 – 2012, Associate Professor 2002 – 2010.

1992 – 2002. **University of Tokyo**, Department of Mechano-Informatics, Graduate School of Information Science and Technology and Faculty of Engineering. Associate Professor, 1994–2002, Lecturer 1992 – 1994.

Visiting Positions

2015–2016. **Kyoto University**, Academic Center for Computing and Media Studies, Visiting Professor.

1998–1999. **University of California at Santa Cruz**, Department of Psychology, Perceptual Science Laboratory, Visiting Professor.

1991 – 1992. **University of Tokyo**, Research Center for Advanced Science and Technology, Visiting Researcher.

Education

Ph.D. in Computer Science. University of California at Berkeley, 1991.

B.S. in Computer and Communication Sciences (with Honors) and Mathematics. **University of Michigan, Ann Arbor**, 1983.

RESEARCH: PUBLICATIONS

BOOKS

Prosodic Patterns in English Conversation. Nigel Ward. Cambridge University Press, 2019.

A Connectionist Language Generator. Nigel Ward. Ablex, 1994.

JOURNAL ARTICLES

Some Pragmatic Functions of Phonetic Reduction. Nigel G. Ward, Raul O. Gomez, Carlos A. Ortega, Georgina Bugarini. submitted to *Speech Communication*, 2024.

A Dimensional Model of Interaction Style Variation in Spoken Dialog. Nigel G. Ward and Jonathan E. Avlia. *Speech Communication*, 149, pp 47 - 62, 2023.

Spoken Language Interaction with Robots: Research Challenges and Issues. Matthew Marge, Carol Espy-Wilson, Nigel G. Ward, *et al. Computer Speech and Language*, 71 (1), 2022.

Inferring Stance in News Broadcasts from Prosodic-Feature Configurations. Nigel G. Ward, Jason C. Carlson, Olac Fuentes. *Computer Speech and Language*, 50, pp 85-104, 2018.

Challenges in Studying Prosody and its Pragmatic Functions: Introduction to the Special Issue. Oliver Niebuhr, Nigel G. Ward. *Journal of the International Phonetic Association*, 48, pp 1-8, 2018.

Non-Native Differences in Prosodic-Construction Use. Nigel G. Ward, Paola Gallardo. *Dialogue and Discourse*, 8, pp 1–31, 2017.

Challenges in Building Highly-Interactive Dialog Systems. Nigel Ward and David DeVault, *AI Magazine*, 37, Winter, pp 7-18, 2016.

A Prosody-Based Vector-Space Model of Dialog Activity for Information Retrieval. Nigel G. Ward, Steven D. Werner, Fernando Garcia, Emilio Sanchis. *Speech Communication*, 68, pages 85-96, 2015.

Prosodic and Temporal Features for Language Modeling for Dialog. Nigel G. Ward, Alejandro Vega, Timo Baumann. *Speech Communication*, 54, pages 161-174, 2012.

Achieving Rapport with Turn-by-Turn, User-Responsive Emotional Coloring. Jaime C. Acosta, Nigel G. Ward. *Speech Communication*, 53, pages 1137-1148, 2011.

American and Arab Perceptions of an Arabic Turn-Taking Cue. Nigel G. Ward, Yaffa Al Bayyari. *Journal of Cross-Cultural Psychology*, 41, pages 270-275, 2010.

Learning to Show You're Listening. Nigel G. Ward, Rafael Escalante, Yaffa Al Bayyari, and Thamar Solorio. *Computer Assisted Language Learning*, 20, pages 385–407, 2007.

Searching for Explanatory Web Pages Using Automatic Query Expansion. Manabu Tauchi. and Nigel Ward. *Computational Intelligence*, 23 (1), pp 3–14, 2007

Towards a Model of Computer Science Graduate Admissions Decisions. Nigel Ward. *Journal of Advanced Computational Intelligence and Intelligent Informatics*, 10, pp 372–383, 2006.

Non-Lexical Conversational Sounds in American English. Nigel Ward. *Pragmatics and Cognition*, 14 (1), 113–184, 2006.

Automatic User-Adaptive Speaking Rate Selection. Nigel Ward and Satoshi Nakagawa. *International Journal of Speech Technology*, 7, pp 235–238, 2004.

A Tool for Taking Class Notes. Nigel Ward and Hajime Tatsukawa. *International Journal of Human-Computer Studies*, 59 (6), pp 959–981, 2003.

A Study in Responsiveness in Spoken Dialog. Nigel Ward and Wataru Tsukahara. *International Journal of Human-Computer Studies*, 59, pp 603–630, 2003.

Adaptive Number-Giving for Directory Assistance (in Japanese). Satoshi Nakagawa and Nigel Ward. *Human Interface Society*, 5 (1), pp 391–396, 2003.

Responding to Subtle, Fleeting Changes in the User's Internal State. Wataru Tsukahara and Nigel Ward. *CHI Letters* 3 (1), 2001. pp 77–84; also CHI 2001 Conference on Human Factors in Computing Systems.

A Design for a Wearable Translation Device. Jani Patokallio and Nigel Ward. *Human Interface*, 3 (3) pp 5–10. 2001.

Prosodic Features which Cue Back-channel Responses in English and Japanese. Nigel Ward and Wataru Tsukahara. *Journal of Pragmatics*, 32, pp 1177–1207, 2000.

Artificial Intelligence and Other Approaches to Speech Understanding: A case study in methodology. Nigel Ward. *Journal of Experimental and Theoretical Artificial Intelligence*, 10, pp 487–493, 1998.

Responsiveness in Dialog and Priorities for Language Research. Nigel Ward. *Systems and Cybernetics*, special issue on Embodied Artificial Intelligence and Artificial Life, 28 (6), pp. 521–533, 1997.

A Parallel Approach to Syntax for Generation. Nigel Ward. *Artificial Intelligence*, 57, pp. 183–225, 1992.

Some Neglected Aspects of the Generation Task. Nigel Ward. *Computational Intelligence*, 8 (1), pp. 161–171, 1992.

REFEREED CONFERENCE PAPERS

Towards a General-Purpose Model of Perceived Pragmatic Similarity. Nigel G. Ward, Andres Segura, Alejandro Ceballos, Divette Marco. Interspeech 2024.

A Collection of Pragmatic-Similarity Judgments over Spoken Dialog Utterances. Nigel G. Ward and Divette Marco. LREC-COLING 2024.

Towards Cross-Language Prosody Transfer for Dialog. Jonathan E. Avila and Nigel G. Ward. Interspeech 2023.

On the Utility of Self-supervised Models for Prosody-related Tasks. Guan-Ting Lin, Chi-. Luen Feng, Wei-Ping Huang, Yuan Tseng, Tzu-Han Lin, Chen-An Li, Hung-yi Lee, Nigel G. Ward. IEEE Workshop on Spoken Language Technology (SLT), 2022. *Best Paper Award*

Comparison of Models for Detecting Off-Putting Speaking Styles. Diego Aguirre, Nigel G. Ward, Jonathan E. Avila, Heike Lehnert-LeHouillier. Interspeech 2022.

Using Interaction Style Dimensions to Characterize Spoken Dialog Corpora. Nigel G. Ward, SigDial, 2022.

Two Pragmatic Functions of Breathy Voice in American English Conversation. Nigel G. Ward, Ambika Kirkland, Marcin Wlodarczak, Eva Szekely. Speech Prosody 2022.

On the Predictability of the Prosody of Dialog Markers from the Prosody of the Local Context. Anindita Nath, Nigel G. Ward. Speech Prosody 2022

Towards Continuous Estimation of Dissatisfaction in Spoken Dialog. Nigel G. Ward, Jonathan E. Avila, Aaron M. Alarcon. SigDial 2021.

Individual Interaction Styles: Evidence from a Spoken Chat Corpus Nigel G. Ward. SigDial. 2021

Using Prosody to Find Mentions of Urgent Problems in Radio Broadcasts. Nigel G. Ward, James A. Jodoin, Anindita Nath, Olac Fuentes. Speech Prosody 2020.

Ten Prosodic Patterns of Turn-Taking in Japanese. Nigel G. Ward. Speech Prosody 2020.

Using Prosody to Spot Location Mentions. Gerardo Cervantes and Nigel G. Ward. Speech Prosody 2020.

A Prosodic Configuration that Conveys Positive Assessment in American English. Nigel G. Ward and James Jodoin, International Congress of the Phonetic Sciences, 2019.

Turn-Taking Predictions across Languages and Genres using an LSTM Recurrent Neural Network. Nigel G. Ward, Diego Aguirre, Gerardo Cervantes, Olac Fuentes. IEEE Workshop on Spoken Language Technology, 2018.

A Corpus-Based Exploration of the Functions of Disaligned Pitch Peaks in American English Dialog. Nigel G. Ward. Speech Prosody, 2018.

Inferring Stance from Prosody. Nigel G. Ward, Jason C. Carlson, Olac Fuentes, Diego Castan, Elizabeth E. Shriberg, Andreas Tsiartas. Interspeech 2017.

Action-Coordinating Prosody. Nigel G. Ward and Saiful Abu. Speech Prosody 2016.

Interactional and Pragmatics-Related Prosodic Patterns in Mandarin Dialog. Nigel G. Ward, Yuanchao Li, Tianyu Zhao, Tatsuya Kawahara. Speech Prosody 2016.

Analysis and Prediction of Morphological Patterns of Backchannels for Attentive Listening Agents. Takashi Yamaguchi, Koji Inoue, Koichiro Yoshino, Katsuya Takanashi, Nigel G. Ward, Tatsuya Kawahara. International Workshop on Spoken Dialogue Systems, 2016.

On the Possibility of Predicting Gaze Aversion to Improve Video-Chat Efficiency. Nigel G. Ward, Chelsey N. Jurado, Ricardo A. Garcia, Florencia A. Ramos. ACM Eye-Tracking Research and Applications (ETRA) 2016.

Automatic Discovery of Simply-Composable Prosodic Elements. Nigel G. Ward. Speech Prosody, 2014.

Using Dialog-Activity Similarity for Spoken Information Retrieval. Nigel G. Ward, Steven D. Werner. Interspeech, 2013.

Patterns of Importance Variation in Spoken Dialog. Nigel G. Ward, Karen A. Richart-Ruiz. SigDial, 14th Annual Meeting of the Special Interest Group on Discourse and Dialogue, 2013.

Towards Empirical Dialog-State Modeling and its Use in Language Modeling. Nigel G. Ward and Alejandro Vega, Interspeech 2012.

A Bottom-Up Exploration of the Dimensions of Dialog State in Spoken Interaction. Nigel G. Ward and Alejandro Vega, SigDial, 13th Annual Meeting of the Special Interest Group on Discourse and Dialogue 2012. (nominated for best paper)

Representing the Prosodic Context of Words using Gaussian Mixture Models. Shreyas A. Karkhedkar, Nigel G. Ward. Speech Prosody 2012.

Dialog Prediction for a General Model of Turn-Taking. Nigel G. Ward, Olac Fuentes, Alejandro Vega. Interspeech 2010.

Lexico-Prosodic Anomalies in Dialog. Nigel G. Ward, Alejandro Vega and David G. Novick. Speech Prosody 2010.

Using Subtle Prosodic Variation to Acknowledge the User's Current State. Nigel G. Ward, Rafael Escalante-Ruiz. Interspeech 2009.

Estimating the Potential of Signal and Interlocutor-Track Information for Language Modeling. Nigel G. Ward, Benjamin H. Walker. Interspeech 2009.

Responding to User Emotional State by Adding Emotional Coloring to Utterances. Jaime C. Acosta, Nigel G. Ward. Interspeech 2009.

Modeling the Effects of Time-Into-Utterance on Word Probabilities. Nigel G. Ward and Alejandro Vega. Interspeech 2008.

Factors Affecting Speaking-Rate Adaptation in Task-Oriented Dialogs. Nigel G. Ward and S. Kumar Mamidipally. Speech Prosody 2008.

Prosodic Features that Cue Back-Channel Feedback in Northern Mexican Spanish. Anais G. Rivera and Nigel G. Ward. *Proceedings of the Seventh Annual High Desert Linguistics Society Conference*, University of New Mexico, 2008.

Looking for Telecommunication Channel Preference Differences between Bystanders and Talkers. Nigel G. Ward, Anais G. Rivera and Alejandro Vega. Human Factors in Telecommunications 2008.

A Case Study in the Identification of Prosodic Cues to Turn-Taking: Back-Channeling in Arabic. Nigel Ward and Yaffa Al Bayyari. Interspeech 2006.

Prosodic Feature Generation for Back-channel Production. Thamar Solorio, Olac Fuentes, Nigel Ward, Yaffa Al Bayyari. Interspeech 2006.

Root Causes of Lost Time and User Stress in a Simple Dialog System. Nigel G. Ward, Anais G. Rivera, Karen Ward, David G. Novick. Interspeech 2005.

Training Wheels for the Command Line. David Herrera and Nigel Ward. 11th International Conference on Human-Computer Interaction, 2005.

Dealing with Uncertainty in a Model of Computer Science Graduate Admissions Decisions. Nigel Ward. Fifth International Conference on Intelligent Technologies, 2004.

Pragmatic Functions of Prosodic Features in Non-Lexical Utterances, Nigel Ward, Speech Prosody, 2004.

Nasalization in Japanese Back-Channels bears Meaning Masafumi Okamoto and Nigel Ward, International Congress of the Phonetic Sciences, 2003.

Designing A Tool for Taking Lecture Notes, Nigel Ward and Hajime Tatsukawa, Human-Computer Interaction International Conference 2003.

Software for Taking Notes in Class. Nigel Ward and Hajime Tatsukawa, Frontiers in Education 2003.

Automatic User-Adaptive Speaking Rate Selection for Information Delivery. Nigel Ward and Satoshi Nakagawa. International Conference on Spoken Language Processing, 2002.

Can Confidence Scores Help Users Post-Editing Speech Recognizer Output? Taku Endo, Nigel Ward and Minoru Terada. International Conference on Spoken Language Processing, 2002.

Conversational Grunts and Real-time Interaction. Nigel Ward. International Conference on Speech Processing. 2001.

Searching for Explanatory Web Pages using Query Expansion. Manabu Tauchi and Nigel Ward. Pacific Association for Computational Linguistics (PACLING) 2001.

Design for a System able to use Time-Critical Spoken Advice. Shunsuke Soeda and Nigel Ward. Fifteenth National Conference of the Japanese Society for Artificial Intelligence, 2001.

Automatic Tuning of Terminology Queries to Search Engines. (in Japanese). Manabu Tauchi and Nigel Ward. 7th Meeting of the (Japanese) Association for Natural Language Processing, 2001.

The Challenge of Non-Lexical Speech Sounds. Nigel Ward. International Conference on Spoken Language Processing, 2000.

Evaluating Responsiveness in Spoken Dialog Systems. Wataru Tsukahara and Nigel Ward. International Conference on Spoken Language Processing, 2000.

Pacing Spoken Directions to Suit the Listener. Tatsuya Iwase and Nigel Ward. International Conference on Spoken Language Processing, 1998.

The Relationship between Sound and Meaning in Japanese Back-channel Grunts. Nigel Ward. 4th Meeting of the (Japanese) Association for Natural Language Processing, 1998.

Using Prosodic Clues to Decide When to Produce Back-channel Utterances. Nigel Ward. International Conference on Spoken Language Processing, 1996.

Artificial Intelligence and Other Approaches to Speech Understanding: A case study in methodology. Nigel Ward. Tenth National Conference of the Japanese Society for Artificial Intelligence, 1996. pages 403–406,

A Lightweight Parser for Speech Understanding. Nigel Ward. International Conference on Spoken Language Processing, 1994.

Towards Unrestricted Syntax for Speech Understanding. Nigel Ward. 48th National Conference, Information Processing Society of Japan, 1994.

An Alternative to Deep Case for Representing Meaning Relations. Nigel Ward. International Conference on Computational Linguistics (COLING-92), 1992.

Decomposing Deep Cases. Nigel Ward. 43rd National Conference, Information Processing Society of Japan, 1991.

A Connectionist Treatment of Grammar for Generation. Nigel Ward. *Proceedings of the Twelfth Cognitive Science Conference*, Lawrence Erlbaum Associates, 1990.

Capturing Intuitions about Human Language Production. Nigel Ward. *Proceedings of the Eleventh Cognitive Science Conference,* Lawrence Erlbaum Associates, Hillsdale, New Jersey, 1989.

On the Ordering of Decisions in Machine Translation. Nigel Ward. Third National Conference of the Japanese Society for Artificial Intelligence, 1989.

A Model for Natural Machine Translation. Nigel Ward. 38th National Conference, Information Processing Society of Japan, 1989.

Issues in Word Choice. Nigel Ward. International Conference on Computational Linguistics (COLING-88), 1988.

BOOK CHAPTERS

Prosodic Constructions. Nigel Ward. Cambridge Handbook of Construction Grammar. Mirjam Fried and Kiki Nikiforidou, eds. Cambridge University Press, 2024, to appear.

A Prosodic Feature that Invites Back-Channels in Egyptian Arabic. Nigel Ward and Yaffa Al Bayyari, *Perspectives in Arabic Linguistics XX*, Mustafa Mughazy, ed., 187-206 John Benjamins, 2007.

Shrdlu. Nigel Ward. in Encyclopedia of Cognitive Science, Nature Publishing Group, 2002.

Machine Translation. Nigel Ward and Daniel Jurafsky. in *Speech and Language Processing, 1st Edition,* by Daniel Jurafsky and James H. Martin, 720–751. Prentice-Hall, 2000

A Responsive Dialog System. Nigel Ward and Wataru Tsukahara. in *Machine Conversations*, edited by Yorick Wilks, 169–174. Kluwer, 1999.

REFEREED SYMPOSIUM AND WORKSHOP PAPERS

The Prosodic Expressions of Negative Micro-Sentiment Vary Across Corpora. Dimitri Lyon, Nigel G. Ward. International Workshop on Spoken Dialogue Systems, 2023.

Ten Challenges in Highly-Interactive Dialog Systems. Nigel G. Ward, David Devault. AAAI Symposium on Turn-taking and Coordination in Human-Machine Interaction, 2015.

The Similar Segments in Social Speech Task. Nigel G. Ward, Steven D. Werner, David G. Novick, Elizabeth E. Shriberg, Catharine Oertel, Louis-Philippe Morency, Tatsuya Kawahara. MediaEval 2013 Workshop.

Evaluating Prosody-Based Similarity Models for Information Retrieval. Steven D. Werner, Nigel G. Ward. MediaEval 2013 Workshop.

Visualizations Supporting the Discovery of Prosodic Contours Related to Turn-Taking. Nigel G. Ward, Joshua L. McCartney. Interdisciplinary Workshop on Feedback Behaviors in Dialog, 2012.

Possible Lexical Cues for Backchannel Responses. Nigel G. Ward. Interdisciplinary Workshop on Feedback Behaviors in Dialog, 2012.

Where in Dialog Space does Uh-huh Occur? Nigel G. Ward, David G. Novick, Alejandro Vega Interdisciplinary Workshop on Feedback Behaviors in Dialog, 2012.

Directions for Research on Spoken Dialog Systems, Broadly Defined. Nigel G. Ward. Workshop on Future Directions and Needs in the Spoken Dialog Community, at NAACL-HLT 2012.

Temporal Distributional Analysis. Nigel G. Ward. Semdial Workshop on the Semantics and Pragmatics of Dialogue, 2011.

The Challenge of Modeling Dialog Dynamics. Nigel G. Ward. Workshop on Modeling Human Communication Dynamics, at Neural Information Processing Systems 2010

Towards the Use of Inferred Cognitive States in Language Modeling, Nigel Ward and Alejandro Vega, IEEE Workshop on Automatic Speech Recognition and Understanding, 2009.

A Framework for Model-based Evaluation of Spoken Dialog Systems. Sebastian Möller and Nigel Ward. 9th Sigdial Workshop on Discourse and Dialogue, 2008.

Differences Between Americans and Arabs in the Production and Interpretation of Verbal and Non-verbal Dialogue Behavior. Maria L. Flecha-Garcia, David G. Novick, and Nigel G. Ward. Speech and Face to Face Communication Wokshop, pp 47–48, 2008.

A Combined Method for Discovering Short-Term Affect-Based Response Rules for Spoken Tutorial Dialog. Tasha Hollingsed and Nigel Ward. Workshop on Speech and Language Technology in Education (SLaTE) 2007.

Evaluating Real-Time Responsiveness in Dialog. Nigel G. Ward. Interspeech 2006 Satellite Workshop: Dialogues on Dialogues: Multidisciplinary Evaluation of Advanced Speech-Based Interactive Systems.

On the Expressive Competencies Needed for Responsive Systems, Nigel Ward. Workshop on Subtle Expressivity for Characters and Robots at CHI 2003.

Machine Translation in the Mobile and Wearable Age, Nigel Ward. Machine Translation Roadmap Workshop at TMI-MT. 2002.

A Tool for Taking Lecture Notes (in Japanese). Hajime Tatsukawa and Nigel Ward. Interaction 2002, Information Processing Society of Japan. 2002.

An Analysis of Lecture Notes and a System for Note-taking (in Japanese). Hajime Tatsukawa and Nigel Ward. Workshop on Interactive Systems and Software (WISS). 2001.

A Wearable Cross-Language Communication Aid. Jani Patokallio and Nigel Ward. International Symposium on Wearable Computing. 2001.

Issues in the Transcription of English Conversational Grunts. Nigel Ward. 1st SIGdial Workshop on Discourse and Dialogue. ACL. 2000

Requirements for a Socially Aware Free-standing Agent. Nigel Ward and Takeshi Kuroda. Proceedings of the Second International Symposium on Humanoid Robots, 108–114, 1999.

Low-Pitch Regions as Dialog Signals? Evidence from Dialog-Act and Lexical Correlates in Natural Conversation. Nigel Ward. European Speech Communication Association (ESCA) Workshop on Dialogue and Prosody. 1999.

Some Exotic Discourse Markers of Spoken Dialog. Nigel Ward. Association for Computational Linguistics, Workshop on Discourse Relations and Discourse Markers, 1998.

A Simple Rule for Cooperative Timing of Utterances in Spoken Dialog. Nigel Ward. IJCAI-97 Workshop on Collaboration, Cooperation and Conflict in Dialogue Systems, 1997.

A Responsive Dialog System. Nigel Ward and Wataru Tsukahara. First International Workshop on Human-Computer Conversation, 1997.

Reactive Responsiveness in Dialog. Nigel Ward. AAAI Fall Symposium on Embodied Cognition and Action, 1996.

An Approach to Tightly-Coupled Syntactic/Semantic Processing for Speech Understanding. Nigel Ward. AAAI Workshop on the Integration of Natural Language and Speech Processing, 1994.

On the Role of Syntax in Speech Understanding. Nigel Ward. Proceedings of the International Workshop on Speech Processing (also Technical Report SP93-76, IEICE), 1993.

A Connectionist Treatment of Grammar for Generation: Relying on Emergents. Nigel Ward. Proceedings of the Fifth International Workshop on Natural Language Generation, 1990.

An Open Design for Generation. Nigel Ward. Proceedings of the AAAI Workshop on Text Planning and Generation, 1988.

TECHNICAL REPORTS

Topics in the Study of the Pragmatic Functions of Phonetic Reduction in Dialog. Nigel G. Ward, Carlos A. Ortega. Technical Report UTEP-CS-24-23, 2024.

Dialogs Re-enacted Across Languages, Version 2. Nigel G. Ward, Jonathan E. Avila, Emilia Rivas, Divette Marco. Technical Report UTEP-CS-23-27, 2023.

Dialogs Re-enacted Across Languages. Nigel G. Ward, Jonathan E. Avila, Emilia Rivas. Technical Report UTEP-CS-22-108, 2022.

The UTEP Corpus of Dissatisfaction in Spoken Dialog. Jonathan E. Avila, Nigel G. Ward, Aaron Alarcon. UTEP Technical Report UTEP-CS-21-23, 2021.

Planning for a Corpus of Continuous Ratings of Spoken Dialog Quality. Nigel G. Ward. Technical Report UTEP-CS-19-28, 2019.

Preliminaries to a Study of Stance in News Broadcasts. Nigel G. Ward. Technical Report UTEP-CS-16-66, 2016.

A Corpus for Investigating English-Language Learners' Dialog Behaviors. Nigel G. Ward and Paola Gallardo. Technical Report UTEP-CS-15-32, 2015

Data Collection for the Similar Segments in Social Speech Task. Nigel G. Ward, Steven D. Werner. Technical Report UTEP-CS-13-58, 2013.

Lexical and Prosodic Indicators of Importance in Spoken Dialog Nigel G. Ward, Karen A. Richart-Ruiz. Technical Report UTEP-CS-13-41, 2013.

Thirty-Two Sample Audio Search Tasks. Nigel G. Ward, Steven D. Werner. Technical Report UTEP-CS-12-39, 2012.

Visualization to Support the Discovery of Prosodic Contours Related to Turn-Taking. Nigel G. Ward, Joshua L. McCartney. Technical Report UTEP-CS-10-24, 2010.

Studies in the Use of Time Into Utterance as a Predictive Feature for Language Modeling. Alejandro Vega, Nigel G. Ward. Technical Report UTEP-CS-10-22.

Looking for Entropy Rate Constancy in Spoken Dialog. Alejandro Vega, Nigel G. Ward. Technical Report UTEP-CS-09-19.

Additional Information about American and Arab Perceptions of an Arabic Turn-Taking. Cue. Nigel Ward and Yaffa Al Bayyari. University of Texas at El Paso Technical Report UTEP-CS-08-34

Testing the Value of a Time-based Language Model for Speech Recognition. Nisha Kiran and Nigel G. Ward. University of Texas at El Paso Technical Report UTEP-CS-08-29.

Reasons why Mobile Telephone Conversations may be Annoying: Considerations and Pilot Studies. Nigel G. Ward, Anais G. Rivera and Alejandro Vega. University of Texas at El Paso Technical Report UTEP-CS-07-60, 2007.

Three Prosodic Features that Cue Back-Channel Feedback in Northern Mexican Spanish. Anais G. Rivera and Nigel G. Ward. University of Texas at El Paso Technical Report UTEP-CS-07-12, 2007.

Detecting Filled Pauses in Tutorial Dialogs. Gaurav Garg and Nigel G. Ward. University of Texas at El Paso Technical Report UTEP-CS-06-32, 2006.

Automatic Labeling of Back Channels. Udit Sajjanhar and Nigel G. Ward. University of Texas at El Paso Technical Report UTEP-CS-06-26, 2006.

The UTEP Corpus of Iraqi Arabic. Nigel Ward, David Novick, and Salamah I. Salamah. University of Texas at El Paso Technical Report UTEP-CS-06-02, 2006.

Some Usability Issues and Research Priorities in Spoken Dialog Applications. Nigel Ward, Anais Rivera, Karen Ward, and David Novick. University of Texas at El Paso Technical Report UTEP-CS-05-23, 2005.

A Model of Computer Science Graduate Admissions Decisions. University of Texas at El Paso Technical Report UTEP-CS-04-30, 2004.

Non-Lexical Conversational Sounds in American English. University of Texas at El Paso Technical Report UTEP-CS-04-22, 2004.

A Flexible, Parallel Model of Natural Language Generation. University of California at Berkeley Technical Report UCB/CSD 91/629.

MAGAZINE AND NEWSLETTER ARTICLES

Perspectives on Prosody: A New Resource for Language Educators. Nigel Ward. As We Speak, the Newsletter of the TESOL Speech, Pronunciation, and Listening Interest Section, March 2023.

Akanbe~ (nyah-nyah-nyah-nyah) (in Japanese). Nigel Ward. *Gengo*, March 2004.

Moving Note-taking into the Digital Age. Nigel Ward. Syllabus. October 2003.

ndakko (mbye) (in Japanese). Nigel Ward. Nihongo Gaku, April 2002.

Back-channel Feedback as a Reflex Phenomenon (in Japanese). Wataru Tsukahara and Nigel Ward, Gengo, September 1997.

Why not not evaluate AI? Nigel Ward. SIGART Bulletin, 3(3), 1993.

RESEARCH: GRANTS

As PI:

Modeling Prosody for Speech-to-Speech Translation. 2024-2027. NSF. \$600,000

Advancing AI Learning Technologies for Scalable Early Screening and Ability-based Intervention for Children with Speech and Language Related Concerns. NSF AI Institute. 2023 – 2027. \$20M for a consortium led by the University at Buffalo (UTEP share: \$475,309)

Prosody Transfer in Speech-to-Speech Translation. 2023. Meta. \$121,657

Data Collection to Support Development of Models for Cross-Language Prosdy Transfer. UTEP URI Program (internal seed funding, competitive), 2022. \$4998

Modeling Vocal Indications of Annoyance and Disappointment in Dialog. Google (gift), 2020-2021, \$59,802

Dialog-Activity Spotting using Prosodic-Similarity Models. DARPA, 2015-2018, \$804,749

Modeling Turn-Taking in Senior-Citizen Conversations. Industrial Sponsor, 2016-2018, \$133,000.

Preliminaries to the Development of Responsive Prosodic Behaviors for Interactive Systems. NSF, 2014-2015, \$150,000

Dynamic Control of Voice Codec Data Rate using Importance Estimation. University of Texas System (UT Transform), 2013-2014, \$10,000

Time-Based Language Modeling, National Science Foundation (IIS), 2009-2013, \$539,606, including supplements

Developing Models of Back-Channel Behavior and Evaluation Metrics, subcontract to USC Institute for Creative Technologies, 2008–2009, \$39,000.

Back-Channel Behaviors and Perceptions of Rapport, subcontract to USC Institute for Creative Technologies, 2007–2008, \$38,000.

Beyond Words: Identification of Back-Channel Communication Rules in Arabic and Development of Training Methods, DARPA (subcontract to USC ISI), 2005-2007. \$419,876.

Modeling Real-Time Interpersonal Interaction in Spoken Communication, Principal Investigator, National Science Foundation, 2004–2009. \$506,878, including supplements.

A Wearable System to Support Cross-Language Communication, (Principal Investigator), 1,000,000Y =. Casio Foundation, 2001–2002.

Prosodic Aspects of Sub-lexical Utterances, 5,650,000¥(subcontract of the Specific Area B Grant on "Prosodic Control for High Quality Speech Synthesis", Ministry of Education, Japan). F2000-2001.

A Conversational-Reflex Training System for Second Language Learners. (Principal Investigator), 2,100,000¥. Specific Area A Grant, Ministry of Education, Japan, F2000.

User-Adaptive Information Delivery by Voice (Principal Investigator) 1,700,000¥. International Communications Foundation, Tokyo, Japan, F1999-2002

Fleeting Facial Expressions in Dialog (Principal Investigator) 1,000,000¥. Okawa Foundation for Information and Telecommunications, Japan, F1999-2000

Paralinguistic Information as a New Interface Modality for Information Delivery Systems (Principal Investigator) 2,500,000¥. Fundamental Research Grant, Ministry of Education, Japan, F1999-2000

The Acoustic and Meaning Components of Grunts (Principal Investigator) 800,000¥. Inamori Foundation, Kyoto, Japan, F1998-1999.

A System to Assist Rote Learning (Principal Investigator) 3,000,000¥. Hayao Nakayama Foundation, Tokyo, Japan, F1997.

A Basic Study of Grunts in Communication (Principal Investigator) 1,000,000¥. Sound Technology Promotion Foundation, Tokyo, Japan, F1996.

Training Fingers for Machinery Operation using Real Time Responsive Spoken Instruction (Principal Investigator), 1,100,000¥. Young Researcher Development Grant, Ministry of Education, Japan, F1996.

Learning Control for the Integration of Multiple Knowledge Sources and Semantic Feedback for Speech Understanding (Principal Investigator), 1,400,000¥, Priority Research Area Grant, Ministry of Education, Japan, F1995.

Exploiting Speech Understanding in Intelligent Interfaces (in cooperation with the International Computer Science Institute) (Principal Investigator), 4,200,000¥, International Cooperation Grant, Ministry of Education, Japan, F1994-1995.

A Speech Dialog System Incorporating a Parallel Evidential Inferential Understanding Component (Principal Investigator), 1,900,000¥, Priority Research Area Grant, Ministry of Education, Japan, F1994.

Semantic Feedback for Speech Understanding in Man-Machine Interfaces (Principal Investigator), 900,000¥, Young Researcher Development Grant, Ministry of Education, Japan, F1994.

Parallel Syntactic Hypotheses for Speech Understanding (Principal Investigator), 500,000¥, Artificial Intelligence Promotion Foundation, Nagoya, Japan, F1993.

Travel Grant, 150,000¥, Hara Research Foundation, Osaka, Japan, 1992.

As Co-PI:

Active Listening and Trust Across Cultures, PI David Novick, Department of Defense, 2007–2009, \$181,264.

Effectiveness of Visualization to Improve Public Participation in Transportation Planning, PI Ruey L. Cheu. Federal Highway Administration, 2008-2009. \$82,961,

Friendly Artifact: Research on a Machine for Observing, Understanding, and Responding to Human Behavior, PI N. Nakajima, NEDO, 1996-1999, 55,000,000¥

RESEARCH: PRESENTATIONS

KEYNOTE TALKS

International Conference on Construction Grammar: Prosodic Constructions, Prague, 2023

RobotDial workshop at IJCAI 2021: Spoken Language Interaction with Robots: Research Challenges and Issues. Nigel G. Ward, Matthew Marge, 2021

NSF Speech in Robotics Workshop: Prosody in Dialog and Action Coordination, University of Maryland, 2019

SimPhon.net Workshop: A Semi-Automatic Method for Discovering Prosodic Constructions. Matrahaza, Hungary, 2017.

20th Workshop on the Semantics and Pragmatics of Dialogue (Semdial): Prosody, Action, and Coordination in Real-time Gameplay. New Brunswick, NJ, 2016.

6th Dialog Systems Symposium: Dialog Modeling beyond Dialog Systems, Tokyo, 2015.

8th ISCA Speech Synthesis Workshop: Prosodic Patterns in Dialog, October 2013

International Conference on Speech Processing Conversational Grunts and Real-time Interaction. Taejon, Korea. August 2001.

OTHER INVITED CONFERENCE AND WORKSHOP TALKS

Pretrained Prosodic Models for Pragmatics Purposes, JSALT Planning Workshop, Johns Hopkins, November 2021

Workshop on Formalizing Dialogue Genres for Efficient Virtual Character Creation, invited talk: Extracting Patterns of Interaction from Dialog Data, University of Southern California, Institute for Creative Technologies, September 2014

Panel on Future Directions in Dialog Systems, panelist, at the REAL Challenge Workshop at ACL, June 2014

Dialog Prediction for a General Model of Turn-Taking. USC-UTEP Workshop on Predictive Models of Human Communication Dynamics, Institute for Creative Technologies, Los Angeles, August 2010.

Workshop on Cross-cultural and Culture-specific Aspects of Conversational Backchannels and Feedback, invited talk: Ten Questions about Back-Channels, and Some Incomplete Answers. University of Southern California, Institute for Creative Technologies: December 2006.

Institute of Electronics, Information, and Communication Engineers, Thought and Language Group: invited talk: Ephemeral Emotions and Responsiveness in Dialog. Tokyo. 2001.

17th Annual Conference of the Semiotics Society of Japan, invited talk: Back-channel Feedback as a Reflex Phenomenon. Tokyo. 1997.

Workshop on Computational Models of Human Syntactic Processing, invited talks: A Parallel Approach to Syntax for Generation; Second Thoughts on an Artificial Intelligence Approach to Speech Understanding. Wassenaar, The Netherlands, June 1996.

OTHER INVITED TALKS

UT Austin: A Dimensional Model of Interaction Style Variation in Spoken Dialog. Forum for Artificial Intelligence, April 2022.

Google Ads: Microsentiment in Spoken Dialog: Some Subtleties of Positive and Negative Assessment, October 2021.

Google Ads: Dimensions of Interaction Style Variation in Spoken Dialog, August 2020.

Carnegie Mellon University: Prosodic Constructions and Human Interaction, November 2019.

University of Graz: Prosodic Constructions: Five American English Examples, September 2019.

University of California, Davis: The Subsecond Patterns of Interaction in Dialog: Discovery and Applications, June 2019.

Michigan State University: Inferring Stance in News Broadcasts from Prosodic-Feature Configurations, May 2017.

Phonology Association in Kansai: Prosodic Constructions in Japanese Dialog. Kobe, April 2016.

NAIST (Nara Advanced Institute for Science and Technology): The Subsecond Patterns of Interaction in Dialog: Discovery and Applications. Nara, September 2015.

IEEE Signal Processing Society, Kansai Section, public lecture: Human Activity Recognition, User State Inference, and Behavior Pattern Discovery: Lessons from the Prosody of Dialog. Kyoto, October 2015.

KTH (Swedish Royal Institute of Technology), Department of Speech, Music and Hearing: The Dimensions of Dialog State in Spoken Interaction. September 2012.

Carnegie Mellon University: Language Technologies Institute, Prosody and Prediction for Dialog Systems, and in Particular for Language Modeling, Adaptation and Turn-Taking. November 2010.

University of Southern California: Institute for Creative Technologies, Learning to Show You're Listening: A Trainer for Back-Channeling in Arabic. October 2006.

University of Pittsburgh: Computer Science Department, Learning to Show You're Listening: A Trainer for Back-Channeling in Arabic. September 2006.

Wayne State University: A Tool for Taking Lecture Notes. March 2002.

Keio University, Philosophy Department Lecture Series: Sense, Nonsense, and Computer Conversation. Tokyo, July 1996.

Waseda University, Information and Cognition Seminar Series: On the Role of Syntax in Speech Understanding. Tokyo, December 1993.

Hara Foundation Advanced Technology Lecture Series. Connectionist Natural Language Processing, Tokyo, February 1993.

International Workshop on Future Generations of Natural Language Processing, Future Directions for NLP, panelist. Kyoto, July 1991.

Fujitsu KSA Forum, Towards Natural Machine Translation. Iizuka, Japan, May 1989.

NTT, Towards Natural Machine Translation. Yokosuka, Japan, May 1989.

ATR, Towards Natural Machine Translation. Kyoto, April 1989.

REFEREED PRESENTATIONS (without papers)

Four Pragmatic Functions Associated with Different Aspects of Disfluency in American English Dialog. Presentation at the Workshop on Prosodic Features of Language Learners Fluency at Speech Prosody 2024.

The Value of Prosodic Constructions for Modeling Pragmatics-Related Prosody. Nigel G. Ward and Oliver Neibuhr. Poster at the "CROSSIN: Intonation at the crossroads" workshop at Speech Prosody 2024.

Reduction as A Secret Side-Channel in Human Speech: When Less Clear is More Positive. Nigel G. Ward. Annual Meeting of the Linguistic Society of America, 5-Minute Linguist Session (Plenary), 2024

Adventures in the Pedagogy of Prosody. Nigel G. Ward. Full Presentation. TESOL Convention, 2023.

Teaching the Prosody of Contrast and Complaint Nigel G. Ward. Teaching Tip at the TESOL Convention, 2023.

Patterns of Interactional Prosody in Youth with and without Autism. Nigel G. Ward, Jonatan M. Contreras, Heike Lehnert-LeHouillier. International Society for Autism Research Conference (INSAR), 2021

On the Generality of Complex Dimensions of Interaction Style. Nigel G. Ward. poster given at the Annual Meeting of the Linguistic Society of America, January 2021

Uses of Positive Assessment Prosody in Local Radio News. Nigel G. Ward. International Pragmatics Association Meeting, Panel on Expressing Stance in Spoken Language, 2019, Hong Kong.

Interjections in Action. Yuko I. Ward and Nigel G. Ward. International Pragmatics Association Meeting, Panel on Interjections, 2019, Hong Kong.

A Prosodic Configuration that Conveys Positive Assessment in American English. Nigel G. Ward and James Jodoin, Texas Linguistics Society, 2019.

Prosody and Politeness in Three Dialog Acts. Nigel G. Ward. Teaching Tip at the TESOL Convention, 2019.

Teaching the Prosody of Positive Assessments. Nigel G. Ward. Teaching Tip at the TESOL Convention, 2019.

Prosodic Constructions in English Dialog: Form, function, learner needs, and teachability. Nigel G. Ward. Pronunciation in Second Language Learning and Teaching Conference, 2017, Salt Lake City.

Prospects for Evaluating Prosody Models using Dialog Data. Nigel G. Ward. Common Prosody Platform Workshop, 2016, Boston.

An Investigation of Non-Native Prosodic Behavior in Dialog. Nigel G. Ward. Japan Phonetics Society, December 2015, Tokyo.

Prosodic Constructions in Japanese Dialog: Preliminary Observations. Nigel G. Ward. Japan Pragmatics Society, 2015, Nagoya.

Teaching the Prosodic Constructions of Dialog. Nigel G. Ward. Japan Association for Language Teaching, 2015, Shizuoka.

Prosodic Constructions for Contrast, Complaint, and Contradiction; and their Common Elements. Nigel G. Ward. International Pragmatics Association Meeting, Panel on Prosodic Constructions in Dialog, 2015, Antwerp.

Teaching the Prosodic Constructions of Dialog. Nigel G. Ward. Japan Association for Language Teaching Conference, 2015, Shizuoka.

Functions of Short Narrow-Pitch-Range Regions in Native and Non-Native English Dialog. Nigel G. Ward and Paola Gallardo. 11th High Desert Linguistics Society Meeting, 2014, Albuquerque.

Differences between Americans and Arabs in the Production and Interpretation of Verbal and Non-verbal Dialogue Behavior. Maria L. Flecha-Garcia, David G. Novick and Nigel G. Ward. Speech and Face to Face Communication Workshop, 2008, Grenoble

Studies in Cross-Cultural Interpretations of Back-Channeling Behavior. Yaffa Al Bayyari and Nigel Ward. 2008 Meeting of the Society for Cross-Cultural Research.

Active Listening and Trust across Cultures. Behavioral Scientists Workshop. DoD. Oct 2007.

The Role of Gesture in Inviting Back-Channels in Arabic. Yaffa Al Bayyari and Nigel Ward. 10th Meeting of the International Pragmatics Association, 2007.

Learning to Show You're Listening: A Back-Channel Trainer for Arabic Rafael Escalante, Nigel G. Ward, Yaffa Al Bayyari and Thamar Solorio. Calico 2007.

A Combined Method for Discovering How to Detect and Respond to the Learner's Shortterm Affective States. Tasha Hollingsed and Nigel Ward. Society for Personality and Social Psychology, 2007.

A Prosodic Feature that Invites Back-Channels in Egyptian Arabic. Nigel Ward and Yaffa Al Bayyari, 20th Arabic Linguistics Symposium, 2006.

Real-Time Social Skills and Responsiveness in Dialog. Social Resonance Workshop, CSLR, University of Colorado. November 2003.

Moving Note-taking into the Digital Age, Nigel Ward and Hajime Tatsukawa, Syllabus — Technology for Higher Education 2003.

Sound Symbolism in *uh-huh, uh-hn, mm, uh* **and the like**. Nigel Ward. paper given at the Annual Meeting of the Linguistic Society of America, January 2001

Inferring Processing Times from a Corpus of Conversations Nigel Ward. poster presented at the First Conference on Computational Psycholinguistics, August 1997

Theoretical Chastity and Technical Promiscuity in Connectionist Studies of Natural Language. AAAI Spring Symposium: Connectionist Natural Language Processing, March 1991.

SYSTEM DEMONSTRATIONS

A Prototype Dialog Predictor. Nigel Ward, Alejandro Vega, Olac Fuentes and Shreyas Karkhedkar. Interspeech 2010.

Using Emotion to Gain Rapport in a Spoken Dialog System. Jaime C. Acosta and Nigel Ward. Interspeech 2009.

A Software Suite for Learning Arabic Back-Channel Behaviors. Rafael Escalante and Nigel Ward. Workshop on Speech and Language Technology in Education (SLaTE) 2007.

Aizula, A Back-channeling System for English and Japanese. ELSNet Speech System Olympics, at Eurospeech 1997.

RESEARCH: OTHER

PATENT

Dynamic Control of Voice Codec Data Rate. US Patent 9,208,798. Nigel Ward, Timo Baumann, Shreyas A. Karkhedkar, and David G. Novick. 2015

PUBLIC DOMAIN SOFTWARE

Mid-Level Prosodic Feature Toolkit, github.com/nigelgward/midlevel, 2015–present

The Acceptance Estimator for Computer Science Graduate Admissions Decisions. 2004–2022

Prosody-Based Property Inference Package, github.com/nigelgward/stance, 2017

Prosodic Principal Components Analysis Toolset 2013 – 2015

Didi, a Dialog Display and Analysis Tool. 2003

Pstone, a Tool for Teaching Context-Free Grammar Writing. 2000

The Spoken Language Understanding Mini-Challenge. 1995

The Lotec Speech Recognition System. 1994. (also in the Artificial Intelligence Collection, Volume 2, Prime Time Freeware, 1994)

minitoc.sty, version 1. 1990. (revised version by Daniel Jurafsky and Jean-Pierre Drucbert in the TeTeX distribution, 1993, revised 2006).

DATA COLLECTIONS (SELECTED)

Dialogs Re-enacted Across Languages (DRAL), Nigel G. Ward, Jonathan E. Avila, and Emilia Rivas. Linguistic Data Consortium, Catalog Number LDC2024S08, July 2024. (earlier releases available at www.cs.utep.edu/nigel/dral)

Similar Segments in Social Speech, video data in 3 DVDs, with annotations and software. archived in the Special Collections Department of the University of Texas at El Paso Library. Nigel G. Ward and Steven D. Werner. 2013.

The UTEP Corpus of Iraqi Arabic, audio data in 6 CDs. archived in the Special Collections Department of the University of Texas at El Paso Library. Nigel G. Ward, David G. Novick and Salamah I. Salamah. 2006.

DOCTORAL THESES SUPERVISED

Cross-Language Prosody Transfer for More Accurate Speech-to-Speech Translation. Jonathan E. Avila, University of Texas at El Paso, 2023.

On the Predictability of Appropriate Prosody of Dialog Markers Directly from the Local Context. Anindita Nath, University of Texas at El Paso, 2023.

Using Emotion as Inferred from Prosody in Language Modeling. Shreyas A. Karkhedkar, University of Texas at El Paso, 2012.

Using Emotion to Gain Rapport in a Spoken Dialog System. Jaime C. Acosta, University of Texas at El Paso, 2009.

Acknowledgment Selection based on Context and the User's Prosody for a Responsive Spoken Dialog System (in Japanese). Wataru Tsukahara. University of Tokyo. 2000.

AWARDS

Best Paper Award, IEEE SLT 2022.

Fulbright Scholar. 2015-2016.

Best Paper Award, PACLING (Pacific Computational Linguistics Conference), 2001

Kokuhi Fellowship (Japanese Government, Monbusho), 1988–1989.

National Science Foundation Graduate Fellowship, 1983–1986.

AWARDS WON BY ADVISEES

Jonathan E. Avila. Google Dissertation Completion Scholarship, 2022-2023.

Anindita Nath. Generation Google Scholarship, 2020. UPE Executive Council Award, 2019.

Alejandro Vega. University Outstanding Thesis Award for 2012; Honorable Mention, Computing Research Association Outstanding Undergraduate Research Awards 2010.

Jaime C. Acosta. University Outstanding Dissertation Award for 2009; ACTEDS (Army Civilian Training, Education and Development System) award (covering full tuition for the duration of studies, plus one year of paid leave to work full time on Ph.D. research), 2008; Summer Internship at the University of Pittsburgh LearnLab, 2008; Graduate School Banner Bearer for the Spring 2007 Commencement.

Rafael Escalante. Scholarship to attend the NAACL Summer School in Human Language Technology, 2007.

TEACHING

COURSES TAUGHT (some team-taught)

Introduction to Speech and Language Processing. University of Texas at El Paso (UTEP) graduate course, 2018, 2020, 2022, 2023

Human-Computer Interaction. UTEP, graduate course, 2002 – 2010, 2013 – 2014, 2017 – 2022

Human-Computer Interaction. UTEP, undergraduate course, 2016, 2019, 2022

Operating Systems. UTEP, 2021, 2023, 2024

Programming Languages, UTEP, 2014, 2015, 2018, 2019, 2022, 2024

Older Courses

Spoken Dialog Systems. UTEP graduate course, 2006, 2008, 2010, 2015.

Search Engine Technologies. UTEP graduate course, 2007, 2009

Statistical Natural Language Processing. UTEP graduate course, 2003.

Advanced Object-Oriented Programming, UTEP, 2011, 2014. Compilers and Interpreters. UTEP 2003 – 2005. Junior Professional Orientation. UTEP 2005. Introduction to Computer Science. UTEP 2003.

Agent Systems. University of Tokyo (UT) graduate course. 2001.

Natural Language Processing. UT graduate course. 1992 – 1994, 1996, 1997, 1999.

Topics in Cognitive Science. UT graduate course. 1993, 1995.

Software Laboratory. UT (new course). 1997, 1999, 2000.

Artificial Intelligence Programming and Software Engineering. UT, 1996, 1997, 1999–2001.

Engineering-Software Literacy. UT (new course). 2000 (coordinator)

Theory of Computation. UT, 1992 - 1997, 1999, 2000.

Programming Tools and Operating Systems Concepts. UT. 1998.

LISP and Applications. UT, 1992 - 1995.

Artificial Intelligence (as TA). UC Berkeley, 1986.

Compilers (as TA). UC Berkeley, 1985.

TUTORIALS AND SHORT COURSES

Prosody: What, Why and How. Johns Hopkins Summer School on Human Language Technology, 2022.

Prosody: Models, Methods, and Applications. with Gina Levow. Association for Computational Linguistics, 2021.

Prosody Research and Applications: The State of the Art. Interspeech, 2019.

Introduction to Prosody. with Francisco Torreira. 4 week course at the LSA Linguistics Institute, 2019.

Teaching the Prosodic Constructions of English Dialog. Japan Association for Language Teaching Annual Meeting, 2015; Kyoto Chapter of the Japan Association for Language Teaching, March 2016.

Dialog Models and Dialog Phenomena. with Gabriel Skantze, at Interspeech 2015

Introduction to Connectionism. three lectures, University of Science and Technology of China (USTC), Hefei, October 1992.

Machine Translation Tutorial, Conference on Computer Processing of Chinese and Oriental Languages, Toronto, August 1988.

Introduction to LISP. one week intensive course at AT&T Bell Laboratories, as a Consultant for Franz Inc. 1987, 1988.

SERVICE TO THE RESEARCH COMMUNITY

EDUCATION

Co-creator of a 4-hour open-source Prosody Tutorial in 29 lectures, available on Youtube and. via nigelward.com/prosody/, 2022. ~400 hours total watch time

ORGANIZING, ETC.

Chair, Speech Prosody Special Interest Group (SProSIG) of the International Speech Communication Association, 2018-2024.

organizer, Prosody in Tech, Industry Panel at Speech Prosody 2024

lead organizer, Special Session on Speaking Styles and Interaction Styles at Interspeech 2022.

lead organizer, Implications of Deep Learning for Dialog Modeling, special session at Sigdial 2019

co-organizer, Modeling Meaning-Bearing Configurations of Prosodic Features, special session at the International Congress of the Phonetics Sciences, 2019

lead organizer, The Expression of Stance in Spoken Language, panel at the 16th International Pragmatics Association Meeting, 2019.

guest editor, Prosody and Pragmatic Functions, special issue of *the Journal of the International Phonetics Association*, volume 48, issue 1, 2018, with Oliver Niebuhr

lead organizer, Prosodic Constructions in Dialog, panel at the 14th International Pragmatics Association Meeting, 2014.

Similar Segments in Social Speech Task, at the MediaEval Benchmarking Initiative for Multimedia Evaluation. 2013, lead organizer.

Interdisciplinary Workshop on Feedback Behaviors in Dialog, Stevenson, Washington, September 8-9, 2012 (Interspeech Satellite Workshop), lead organizer.

Workshop on Overlap in Human-Computer Dialogue, Los Angeles, September 19-20 2011, coorganizer.

Workshop on Predictive Models of Human Communication Dynamics, August 4-6, 2010, Los Angeles. co-organizer with Louis-Philippe Morency.

Workshop on Modeling Human Communication Dynamics, at the Conference on Neural Information Processing Systems (NIPS), 2010, co-organizer.

Special Session on The Prosody of Turn-Taking and Dialog Acts at Interspeech 2006, lead organizer.

GRANT REVIEWING

National Science Foundation: Panelist (Smart and Connected Health 2017, Speech and Language Processing 2015, Human Language Technologies, 2013, Science and Technology Centers 2011, Robust Intelligence 2009, Advanced Learning Technologies 2005, 2006, 2007, 2008, Human Language and Communication 2004, Information Technology Research 2000); Site Visitor (Science of Learning Centers, 2004); Ad Hoc Reviewer (CISE 2024, Undergraduate Education 2020, Perception, Action, and Cognition 2019, Documenting Endangered Languages 2013, Information, Robotics and Intelligent Systems, 1993, etc.)

Fulbright, Area Reviewer, 2017, 2018; Discipline Reviewer, 2020

French National Research Agency, reviewer

US-Israel Binational Science Foundation, reviewer, 2015

Simulation and Training Technology Center, US Army, reviewer, 2011

Medical Infrastructure Program, US Army, tasked to the American Institute of Biological Sciences, reviewer, 2011

Social Signal Processing Net (EU Project), workpackage reviewer, 2010

Economic and Social Research Council (UK), reviewer, 2006

DISSERTATION EVALUATIONS

Thesis Jury Member for Auriane Boudin, Aix-Marseille University, 2024. Thesis Jury Member for Carol Figueroa, Aix-Marseille University, 2024. External examiner for Zack Hodari, University of Edinburgh, 2022. Opponent for Daniel Neiburg, KTH, 2012.

JOURNAL REVIEWING

Speech Communication, 2004, 2005, 2008, 2010, 2011, 2012, 2013, 2015, 2019, 2021, 2022, 2023, 2024 Computer Speech and Language, 2011, 2013, 2019, 2020 Transactions on Audio, Speech and Language Processing, 2015, 2019, 2021 Discourse and Dialogue, 2023, 2024 Journal of the Acoustical Society of America (JASA) Express Letters, 2024 Language and Speech, 2003, 2020 Cognitive Science, 2020 Pragmatics and Cognition, 2020 Journal of Pragmatics, 2020 Journal of Phonetics, 2011, 2020, 2022 Laboratory Phonology, 2018, 2020, 2023 Cognition, 2019 Phonetica, 2015 International Journal of Artificial Intelligence in Education, 2019 ACM Transactions on Speech and Language Processing, 2011 IEEE Transactions on Affective Computing, 2011, 2012, 2013 Text and Talk, 2021 Lingua, 2011, 2012, 2019 International Journal of Human-Computer Studies, 2004, 2008, 2014 Journal on Multimodal User Interfaces, 2012, 2013

International Journal of Speech Technology, 2001–2007 (editorial board), 2011, 2013, 2016

Journal of the Acoustic Society of America, 2010

Journal of the Southeast Asian Linguistics Society, 2010

Intercultural Pragmatics, 2007

Pattern Recognition Letters, 2014

Journal of Experimental and Theoretical Artificial Intelligence, 1992

Computational Intelligence, 1991

CONFERENCE REVIEWING

Interspeech (and precursors ICSLP and Eurospeech), 2002, 2005 – 2024 (scientific review committee), Area Chair for Paralinguistics 2015, 2017

SIGdial (ACL/ISCA Workshop on Discourse and Dialogue), 2001, 2008, 2011 – 2024 (program committee)

Speech Prosody, 2004 – 2024, also scientific committee in 2020 and advisory committee in 2022

ICMI (ACM International Conference on Multi-Modal Interaction), 2010, 2015 – 2024. Area Chair for Human Communication Dynamics 2016, 2017, Senior Program Committee Member, 2021, 2022, 2024

ACL (Association for Computational Linguistics), 1997, 1998, 2000, 2003, 2013, 2015 – 2022, ACL Rolling Review reviewer 2022 –

ICASSP (IEEE International Conference on Acoustics, Speech, and Signal Processing), 2015 – 2024

NAACL HLT (North American Chapter of the Association for Computational Linguistics — Human Language Technologies Conference) 2009, 2012, 2018, 2022, Dialog and Interactive Systems Area Chair 2021

Speech Prosody and Beyond, Workshop, 2023

CHI (ACM Computer Human Interaction) Conference, 2002 - 2012, 2015, 2017 - 2018

TESOL (Teaching English as a Second or Other Language), 2019, 2020, 2022, 2023

LSA (Linguistics Society of America), 2017, 2021 – 2024, also 5-minute linguist reviewer, 2024

Dialog Systems Technology Challenge 10, at AAAI 2022

IJCAI (International Joint Conference on Artificial Intelligence), 2019 - 2020

Autonomous Agents and Multiagent Systems (AAMAS), 2013, 2015 - 2016

Cognitive Science Conference, 1994, 1998, 2018 – 2024

International Conference on Affective Computing and Intelligent Interaction (ACII), 2015, 2017, 2019, 2022, 2024

EACL (European Chapter of the Association for Computational Linguistics), 2009, 2017.

EMNLP (Empirical Methods in Natural Language Processing), 2013, 2014

ETRA (ACM conference on Eye Tracking Research and Applications), 2016, 2018

Social Computing (ASE/IEEE), 2012

Intelligent User Interfaces, 2009, 2010, 2011 International Congress of the Phonetic Sciences, 2007, 2011 COLING 2002, 2010, 2025 Frontiers in Education, 2006 – 2010 MobileHCI 2008 Association for Machine Translation in the Americas, 2006 International Joint Conference on Natural Language Processing, 2004 International Natural Language Generation Conference, 2002, 2004 Computational Psycholinguistics Conference, 1997

WORKSHOP REVIEWING

Intelligent Virtual Agents (IVA), 2006, 2007, 2019 - 2024

SLT (IEEE Spoken Language Technology Workshop), 2010 – 2016, 2020 – 2022

ASRU (IEEE Workshop on Automatic Speech Recognition and Understanding), 2017, 2019, 2021, 2023

IWSDS (International Workshop on Spoken Dialog Systems), 2014 - 2024

YRRSDS (Young Researchers Roundtable on Spoken Dialog Systems), 2018 – 2024

Semdial (Workshop on the Semantics and Pragmatics of Dialogue), 2011 – 2014, 2020, 2024

International Workshop on Affective Interaction in Natural Environments, 2010, 2013

Workshop on Real-Time Conversations with Virtual Agents, 2011

ACM Multimedia 2010 Workshop on Affective Interaction in Natural Environments

Virtual Conversational Characters Workshop, at the Australasian User Interface Conference, 2003

International Workshop on Lifelike Animated Agents: Tools, Affective Functions and Applications, at PRICAI, 2002

AAAI-94 Workshop on Integration of Natural Language and Speech Processing, 1994

OTHER

Consultant, Texas A&M, for "Programming and Machine Learning Education for Students with Visual Impairments through Compilers, AI and Cloud Technologies" (NSF-sponsored)

Reviewer for various tenure and promotion cases.

Reviewer for book chapters for Cambridge University Press and deGruyter Mouton.

Reviewer for textbook proposals in HCI, Search Engines, Phonetics, etc. for McGraw-Hill, Prentice-Hall, Pearson, Wiley, and Cambridge University Press.

Reviewer for a trade book proposal for MIT Press.

Reviewer of a monograph for Cambridge University Press, 2019.

ARTICLES ON ISSUES IN EDUCATION

The (Un)Predictability of Computer Science Graduate School Admissions. *Communications of the ACM*, 50 (3), pp 104-106, March 2007.

Programming as a Discipline? Nigel Ward. *Communications of the ACM*, 40 (12), pp 113-114, December 1997.

The Nuts and Bolts of Engineering Education. Nigel Ward. Henry Dyer Symposium Proceedings. University of Tokyo, School of Engineering, 1997.

How to be a Terrible Thesis Advisor. Nigel Ward. Net posting 1994, reprinted in *ACM Cross-roads*, 1 (3), 1995.

Japanese Engineering Education: Frustrations and Observations. Nigel Ward. 71st Spring Annual Meeting, Japan Society of Mechanical Engineers, 1994.

DEPARTMENT AND UNIVERSITY SERVICE

LEADERSHIP ROLES

CS Department Chair, 2011 – 2012

Faculty Senate Teaching Effectiveness Committee, Acting Chair, 2024 – College of Engineering Faculty Council, Chair, 2017 – 2019, 2021 – 2023

conege of Englicering Fuculty Courter) enum, 2017 2017, 201

BS in AI Curriculum Design Committee, Chair, 2023

Faculty Senate Academic Policy Committee, Chair, 2021 – 2023

Faculty Senate Information Technology Committee, Chair, 2008 - 2011

CS Graduate Program Chair / Graduate Advisor, 2003 – 2005

OTHER DEPARTMENT AND UNIVERSITY SERVICE

Faculty Senate Secretary, 2024 – 2025.

Conference USA Professor of the Year, UTEP Nominating Committee, 2024

CS Department Workload Policy Committe, 2023

Faculty Senate Academic Policy Committee, 2020 – 2023

Faculty Senate Research Committee, 2017 – 2020

College of Engineering Faculty Council, Secretary, 2016 – 2017

Faculty Senate Teaching Effectiveness Committee, Secretary, 2013 – 2015

CCS Building, Construction Liaison and Move Coordinator, 2011 – 2012

CS Department, Computer Facilities Committee, Chair 2004 – 2011

Department Webmaster 1997-2000, 2003 - 2011

CS Graduate Program Committee Member 2008 – 2011

University Information Technology Strategic Financial and Operational Planning Group Member, 2010 – 2011

College of Engineering, Faculty Council Constitution Task Force, 2007 – 2008 Faculty Senator 2002 – 2003

OTHER

SOCIETY MEMBERSHIPS

ACM (Association for Computing Machinery)

ISCA (International Speech Communication Association)

and SProSig (Speech Prosody Special Interest Group)

and SigDial (Special Interest Group on Dialog and Discourse)

IPSJ (Information Processing Society of Japan)

and SIG-SLP (Spoken Language Processing Special Interest Group)

LANGUAGES

English, Japanese, some French, a little German and Spanish

CITIZENSHIP

USA

REFERENCES

available on request

July 22, 2024