Maxine S. Eskenazi

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Professional Preparation

Carnegie-Mellon University Modern Languages, Education Bachelor of Arts 1973

University of Paris VII Linguistics DEA (Diplome d'Etudes Approfondies - equiv. Masters) 1981

University of Paris XI Computer Science Doctorat de Troisieme Cycle 1984

Appointments

Director, Dialog Research Center at Carnegie Mellon (2015 -)

Principal Systems Scientist Carnegie Mellon University (2010-)

Vice President and Chief Technical Officer, Carnegie Speech Company (2001 - 2011) A CMU spinoff

Associate Teaching Professor, Carnegie Mellon University (2003 - 2009)

Systems Scientist, Carnegie-Mellon University (1996 -2003)

Visiting Research Scholar, Carnegie-Mellon University (1994-1996)

CNRS Tenured Researcher (1990 - 2012)

CNRS Junior Researcher (1986-1990)

Head of the Assessment and Variability theme in the Speech Group at LIMSI CNRS (1984 - 1994)

Grants and Project Funding Sources

Government: National Science Foundation, US Department of Transport, US Department of Education,

National Institute of Standards and Technology, DARPA, EEC programs, Francophonie

Industry: Google, Amazon, Samsung, Siemens

Awards

Best Paper SIGDIAL 2019

Best Paper SIGDIAL 2017

Nominated for Best Paper SIGDIAL 2016

Challenge Winner: The Dialog State Challenge at SIGDIAL2013

Notable Activities

Keynotes:

NeurIPS Workshop Human in the Loop Dialog systems, Virtual, 2020, Users in the Loop user2agent Workshop on User-aware Conversational Agents at ACM IUI Los Angeles, 2019, Beyond Turing: Intelligent Agents Centered on the User

Journees d'Etudes sur la Parole (JEP), Aix-en-Provence, 2018, Avancees en Recherche en Dialogue Human Language Technology for Language Learning Symposium (HLT4LL), Stellenbosch, South Africa, 2013, Language Learning Technology

Eurospeech93, Berlin, 1993, Trends in Speaking Style Research

Invited talks

Assessment of Spoken Dialogue Systems (Young Researchers' Roundtable on Dialogue 2009)

Language Technologies and Education (Portugal 2009)

Invited Tutorial on Speech and Education at Interspeech 2007, Antwerp

Yearly talk to Interns: How to make and create a poster and how to apply to graduate school

Yearly invited talk on the REAP system at PSLC Summer School

Acoustical Society of America Meeting - Speech and Education - December 2006, Hawaii

Conferences:

Organizer NSF Future Directions Workshop, 2019, Pittsburgh

Chair IWSDS workshop, 2017, Farmington, Pennsylvania

Chair SIGDIAL conference, 2013, Metz, France

Chair, SLaTE 2007, Farmington, Pennsylvania

Senior Area Chair NAACL2021

Coorganiser: Journees d'Etudes sur la Parole - SFA, 1987

Penn State Acoustical Society of America Technical Program (1997)

Coorganizer CALICO 2004, Pittsburgh

Scientific Committee: Eurospeech, INSTiL

Organizer, LIMSI Speaking Style Workshop 1995

Session Organizer, COCOSDA (1991, 1993)

Scientific committees, reviewer, Interspeech, NAACL, ACL, EMNLP, SIGDIAL, SLT

Other Activities:

Member of Editorial Board - Computer Speech and Language

Guest Editor - Speech Communication (Elsevier) – special issue on Speech Technologies for Education 2008-2009

SIGDIAL board member 2015-2017

Panelist, NSF, ANR

Founder and first Chair of Speech and Language Technologies in Education (SLaTE), an ISCA Special Interest Group

Founding member COCOSDA

ISCA Distinguished lecturers committee 2015-2017

Scientific Advisor EU PF-STAR project

Scientific Board: CNR Italy

CMU representative to ELRA 1996-2000

Software assessment Advisor: The Learning Company, Interactive Systems

Member Governing Committee, Department of Computer Science, U. Paris XI (1983 - 1995).

Community Service:

Creator of WomenNSpeech list of women working in speech and dialog domains

Creator of How to Run a Meeting instructions for conferences, workshops, etc.

Diversity Director, NSF Pittsburgh Science of Learning Center - developed summer intern program which enabled many minority students to experience research and eventually apply to graduate school

Faculty member in charge of LTI Admitted Grad Student Open House

LTI Admissions Committee

LTI Curriculum Committee

LTI Marriage Committee

LTI Representative on SCS ARCS Scholar Committee MCALL Admissions Head SCS women@scs scholarship committee

Scientific Societies

International Speech Communication Association (ISCA)

Acoustical Society of America

IEEE

Societe Française d'Acoustique

Indexes

h-index -43

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Advising

PhD

Shikib Mehri (present)

Tiancheng Zhao

Pedro Mota

Rui Correira

Jose David Aguas Lopes PhD at Instituto Superior Technico

Antoine Raux

Paul-Eric Stern (LIMSI)

Helene Maynard-Bonneau

Anne Lacheret-Dujour

Postdoc

Kyusong Lee LTI Postdoc

Sungjin Lee LTI Postdoc

Oscar Saz

Yuki Yoshimura Psychology Post-doc (with Brian MacWhinney)

Visitors

Emer Gilmartin

Junki Ohmura

LTI Master (MLT)

Jessica Hyunh

Ting Rui

Yi-Ting

Evgeniia Razumovskaia

Yulun Du

Elliot Schumacher

Andrew Fandrianto

David Pellow

Ting-Yao Hu

Gabriel Parent

Adam Skory

Kevin dela Rosa

Jose Gonzalez

Juan Pino

Michael Heilman

Jonathan Brown,

James Sanders

Jie Hu, LTI MCALL student - advise + direct the 2 summer projects (2001-2002)

Jong Hyun Lee, LTI MCALL student (2004)

<u>Undergraduates</u>

Yuan Gao

Michelle Zhang

Arthur Barelli

Allen Lu

Edward Cai

Ekaterina Villevald

Meheresh Yeditha

Miranda Lin

Wynne Yao

Sashank Gogula

Quiyi Yin

Anand Bollu

Kathrin Probst

Aleata Hubbard

Elizabeth Harris

Yibin Lin

Karen Yarshin Wang

Yan Ke

Fabrizio Ghigi, Visiting Student at CMU

Amy Isard, Visiting Student at LIMSI

Products

Patent

7,149,690

Method and apparatus for interactive language instruction

Datasets

Let's Go dataset on Github https://github.com/DialRC/LetsGoDataset

The YOUTH database, licensing through Carnegie Speech Company 2004.

Communicator Wizard of Oz Data, DARPA 1996.

The CMU KIDS Corpus, 1996, a series of 2 CDROMS of children reading aloud, funded by the NSF and distributed by the Linguistic Data Consortium. Eskenazi, M., Mostow, J., Graff, D., LDC97S63, ISBN 1-58563-120-5.

BREF, a database of read sentences from the French newspaper, Le Monde, distributed by the European Languages Data Association 1992.

The NATO isolated word database 1982, distributed by speech subgroup of NATO

Publications

Books

Eskenazi, M., DeVillers, L., Mariani, J., Advanced Social Interaction with Agents. Springer, 2019.

Eskenazi, M., Levow, G., Meng, H., Parent, G., Suendermann, D. 2013, Crowdsourcing for Speech Processing, Wiley, May 2013.

Papers in Refereed Journals

Pedro Mota, Maxine Eskenazi, Luísa Coheur, MUSED: A multimedia multi-document dataset for topic segmentation, Natural Language Engineering, Cambridge University Press, vol. 24, n. 6, pages 921–946, doi: 10.1017/S1351324918000359, November 2018

Eskenazi, M., 2009, An overview of spoken language technology for education, Speech Communication Special Issue on Spoken Language Technology for Education.

Heilman, M., Collins-Thompson, K., Callan, J., Eskenazi, M., Juffs, A, Wilson, L., 2009, Personalization of Reading Passages Improves Vocabulary Acquisition, Int. Journal of Artificial Intelligence in Education (IJAIED), 2009.

Probst, K., Ke, Y., Eskenazi, M., 2002, Enhancing foreign language tutors - in search of the golden speaker, Speech Communication, 37/3-4 pp. 161-173.

Eskenazi, M. (1999). Using a computer in foreign language pronunciation training: What advantages?, CALICO Journal, 16, 447-469.

Eskenazi, M., (1999) Issues in the use of speech recognition for foreign language tutors invited paper: Language Learning and Technology Journal (online) Vol. 2, No. 2, January 1999, pp. 62-76

Eskenazi, M., Lacheret, A., 1991, Exploration of individual strategies in continuous speech, Speech Communication, vol. 10 no. 3.

Eskenazi, M., Mariani. J., Bornerand, S., (1991), Report on the ICSLP Satellite Workshop on Assessment in Kobe (Japan) and Visits to several Japanese laboratories working on speech communication, 19-30 November 1990, Speech Communication 10, p. 179 - 198.

Eskenazi, M., Lienard, J.S., 1983, Recognition of steady-state French sounds pronounced by several speakers: comparison of human performance and an automatic recognition algorithm, Speech Communication 2, p. 173 - 177.

Memmi, D., Eskenazi, M., Mariani, J., Nguyen-Xuan, A., (1983), Un systeme expert pour la lecture de sonagrammes, Speech Communication, vol. 2, p.234 - 236.

Neel, F., Eskenazi, M., Mariani, J., (1983), Cadrage automatique pour la constitution de dictionnaires d'entites phonetiques, Speech Communication, vol. 2, p.193 - 195.

Papers in Refereed Conferences

<u>2021</u>

Gunasekara, Chulaka, Seokhwan Kim, Luis Fernando D'Haro, Abhinav Rastogi, Yun-Nung Chen, Mihail Eric, Behnam Hedayatnia, Karthik Gopalakrishnan, Yang Liu, Chao-Wei Huang, Dilek Hakkani-Tür, Jinchao Li, Qi Zhu, Lingxiao Luo, Lars Liden, Kaili Huang, Shahin Shayandeh, Runze Liang, Baolin Peng, Zheng Zhang, Swadheen Shukla, Minlie Huang, Jianfeng Gao, Shikib Mehri, Yulan Feng, Carla Gordon, Seyed Hossein Alavi, David Traum, Maxine Eskenazi, Ahmad Beirami, Eunjoon (EJ)Cho, Paul

A. Crook, Ankita De, Alborz Geramifard, Satwik Kottur, Seungwhan Moon, Shivani Poddar, and Rajen Subba. "Overview of the ninth dialog system technology challenge: Dstc9." DSTC9 Workshop at AAAI 2021. https://arxiv.org/abs/2011.06486

Shikib Mehri, Yulan Feng, Carla Gordon, Seyed Hossein Alavi, David Traum, Maxine Eskenazi "Interactive Evaluation of Dialog Track at DSTC9". DSTC9 Workshop at AAAI 2021.

Yulan Feng, Alan W Black, Maxine Eskenazi, 2021, Towards Automatic Route Description Unification In Spoken Dialog Systems, Proceedings IEEE SLT.

2020

Shikib Mehri, Maxine Eskenazi. "Unsupervised Evaluation of Interactive Dialog with DialoGPT," In *Special Interest Group on Discourse and Dialogue (SIGdial)*, 2020.

Shikib Mehri, Maxine Eskenazi. "USR: An Unsupervised and Reference Free Evaluation Metric for Dialog Generation," In Association for Computational Linguistics (ACL), 2020.

Yulan Feng, Shikib Mehri, Maxine Eskenazi, Tiancheng Zhao. "'None of the Above': Measure Uncertainty in Dialog Response Retrieval," In *Association for Computational Linguistics (ACL)*, 2020.

<u>2019</u>

Tiancheng Zhao, Kaige Xie and Maxine Eskenazi Rethinking Action Spaces for Reinforcement Learning in End-to-end Dialog Agents with Latent Variable Models, long paper at NAACL 2019.

Pedro Mota, Maxine Eskenazi, Luísa Coheur, BeamSeg: a Joint Model for Multi-Document Segmentation and Topic Identification, *In* Proceedings of the 23rd Conference on Computational Natural Language Learning, Association for Computational Linguistics, pages 582-592, Hong Kong, China, , November 2019.

Shikib Mehri, Maxine Eskenazi. "Multi-Granularity Representations of Dialog," In *Empirical Methods in Natural Language Processing (EMNLP-IJCNLP)*, 2019.

Shikib Mehri, Alan W Black, Maxine Eskenazi. "CMU GetGoing: An Understandable and Memorable Dialog System for Seniors," In *Workshop on Dialog for Good (DiGo) in SIGdial*, 2019.

Shikib Mehri, Tejas Srinivasan, Maxine Eskenazi. "Structured Fusion Networks for Dialog," In *Special Interest Group on Discourse and Dialogue (SIGdial)*, 2019. [Best Paper Award]

Prakhar Gupta, Shikib Mehri, Tiancheng Zhao, Amy Pavel, Maxine Eskenazi, Jeffrey P Bigham. "Investigating Evaluation of Open-Domain Dialogue Systems With Human Generated Multiple References," In *Special Interest Group on Discourse and Dialogue (SIGdial)*, 2019.

Shikib Mehri, Evgeniia Razumovskaia, Tiancheng Zhao, Maxine Eskenazi. "Pretraining Methods for Dialog Context Representation Learning," In *Association for Computational Linguistics (ACL)*, 2019.

2018

Tiancheng Zhao and Maxine Eskenazi Zero-Shot Dialog Generation with Cross-Domain Latent Actions, in proceedings SIGDIAL2018 a long paper.[Best Paper Award]

Kyusong Lee, Tiancheng Zhao, Alan W Black and Maxine Eskenazi DialCrowd: A toolkit for easy dialog system assessment, in proceedings SIGDIAL2018 demo paper.

Tiancheng Zhao, Kyusong Lee and Maxine Eskenazi, Unsupervised Discrete Sentence Representation Learning for Interpretable Neural Dialog Generation, in proceedings ACL2018 long paper.

Junki Ohmura, Maxine Eskenazi, 2018, Context-Aware Dialog Re-Ranking for Task-Oriented Dialog Systems IEEE SLT 2018.

Pedro Mota, Maxine Eskenazi, Luísa Coheur, Efficient navigation in learning materials: an empirical study on the linking process, *In* Artificial Intelligence in Education (AIED), Springer Lecture Notes in Computer Science (LNCS), London, June 2018.

Mota, P., Eskenazi, M., Coheur, L., 2018, MUSED: A multimedia multi-document dataset for topic segmentation, Natural Language Engineering, Cambridge University Press, Vol 24, 6.

2017

Tiancheng Zhao, Allen Lu, Kyusong Lee and Maxine Eskenazi, Generative Encoder-Decoder Models for Task-Oriented Spoken Dialog Systems with Chatting Capability, in Proceedings of SIGDIAL 2017 as a long paper.

Kyusong Lee, Tiancheng Zhao, Yulun Du, Edward Cai, Allen Lu, Eli Pincus, David Traum, Stefan Ultes, Lina M. Rojas Barahona, Milica Gasic, Steve Young and Maxine Eskenazi, DialPort, Gone Live: An Update After A Year of Development, in Proceedings of SIGDIAL 2017 demo paper.

Tiancheng Zhao, Ran Zhao and Maxine Eskenazi, Learning Discourse-level Diversity for Neural Dialog Models using Conditional Variational Autoencoders, in Proceedings of ACL 2017 long paper.

Kyusong Lee, Tiancheng Zhao, Stefan Ultes, Lina Rojas-Barahona, Eli Pincus, David Traum and Maxine Eskenazi, An Assessment Framework for DialPort, in Proceedings of IWSDS 2017 as a short paper.

Rose Catherine, Kathryn Mazaitis, Maxine Eskenazi and William Cohen, Explainable Entity-based Recommendations with Knowledge Graphs, Proceedings of the 11th ACM Conference on Recommender Systems (RecSys) Posters, 2017, Como, Italy [pdf available at arXiv]

2016

Tiancheng Zhao and Maxine Eskenazi, Towards End-to-End Learning for Dialog State Tracking and Management using Deep Reinforcement Learning, in Proceedings of SIGDIAL 2016 Conference. [Best Paper Nominee Award]

Tiancheng Zhao, Kyusong Lee and Maxine Eskenazi, 2-16, The DialPort Portal: Grouping Diverse Types of Spoken Dialog Systems, in Proceedings of Second Workshop on Chatbots and Conversational Agent Technologies (WOCHAT).

Pedro Mota, Maxine Eskenazi, Luísa Coheur, Multi-document Topic Segmentation Using Bayesian Estimation, *In* Tenth IEEE International Conference on Semantic Computing, ICSC 2016, pages 443-447, doi: 10.1109/ICSC.2016.17, Laguna Hills, CA, USA, February 2016

Correia, Rui and Mamede, Nuno J and Baptista, Jorge and Eskenazi, Maxine, 2016, metaTED: a Corpus of Metadiscourse for Spoken Language., LREC.

Zhao, Tiancheng and Lee, Kyusong and Eskenazi, Maxine, DialPort: Connecting the spoken dialog research community to real user data, Spoken Language Technology Workshop (SLT), 2016 IEEE.

Zhao, Tiancheng and Lee, Kyusong and Eskenazi, Maxine, 2016, DialPort: A General Framework for Aggregating Dialog Systems, Proceedings of the Workshop on Uphill Battles in Language Processing: Scaling Early Achievements to Robust Methods.

2015

Saz, Oscar and Lin, Yibin and Eskenazi, Maxine, 2015, Measuring the impact of translation on the accuracy and fluency of vocabulary acquisition of English, Computer Speech & Language.

Lopes, Jose and Eskenazi, Maxine and Trancoso, Isabel, From rule-based to data-driven lexical entrainment models in spoken dialog systems, Computer Speech & Language.

Zhao, Tiancheng and Black, Alan W and Eskenazi, Maxine, An Incremental Turn-Taking Model with Active System Barge-in for Spoken Dialog Systems., Proceedings of the SIGDIAL 2015 Conference.

Eskenazi, Maxine and Black, Alan W and Lee, Sungjin and Traum, David, The real challenge 2014: Progress and prospects, Proceedings of the 16th Annual Meeting of the Special Interest Group on Discourse and Dialogue.

2014

Correia, Rui and Mamede, Nuno and Baptista, Jorge and Eskenazi, Maxine, Using the crowd to annotate metadiscursive acts, Proceedings 10th Joint ISO-ACL SIGSEM Workshop on Interoperable Semantic Annotation.

Pellow, David and Eskenazi, Maxine, Tracking human process using crowd collaboration to enrich data, Second AAAI Conference on Human Computation and Crowdsourcing.

Black, Alan W and Eskenazi, Maxine, Real Users and Real Dialog Systems: The Hard Challenge for SDS, Natural Interaction with Robots, Knowbots and Smartphones.

Ghigi, Fabrizio and Eskenazi, Maxine and Torres, M Ines and Lee, Sungjin, 2014, Incremental dialog processing in a task-oriented dialog, Fifteenth Annual Conference of the International Speech Communication Association.

2013

Lopes, Jose and Eskenazi, Maxine and Trancoso, Isabel, Automated two-way entrainment to improve spoken dialog system performance, Acoustics, Speech and Signal Processing (ICASSP), 2013 IEEE.

Eskenazi, Maxine and Lin, Yibin and Saz, Oscar, Tools for non-native readers: the case for translation and simplification, Proceedings of the Workshop on Natural Language Processing for Improving Textual Accessibility.

Davis, Elizabeth M and Saz, Oscar and Eskenazi, Maxine, POLLI: a handheld-based aid for non-native student presentations, Speech and Language Technology in Education.

Rosa, Kevin Dela and Eskenazi, Maxine, Self-assessment in the reap tutor: knowledge, interest, motivation, & learning, International Journal of Artificial Intelligence in Education.

Lee, Sungjin and Eskenazi, Maxine, Recipe For Building Robust Spoken Dialog State Trackers: Dialog State Tracking Challenge System Description., Proceedings of the SIGDIAL 2013 Conference.

2012

Correia, Rui and Baptista, Jorge and Eskenazi, Maxine and Mamede, Nuno J, Automatic Generation of Cloze Question Stems, PROPOR.

Lopes, Jose and Fandrianto, Andrew and Eskenazi, Maxine and Trancoso, Isabel, Can a spoken dialog system be used as a tool to study convergence?, Book of Abstracts.

Lopes, Jose and Eskenazi, Maxine and Trancoso, Isabel, Incorporating asr information in spoken dialog system confidence score, Computational Processing of the Portuguese Language.

Fandrianto, Andrew and Eskenazi, Maxine, Prosodic entrainment in an information-driven dialog system, Thirteenth Annual Conference of the International Speech Communication Association.

Lee, Sungjin and Eskenazi, Maxine, Pomdp-based let's go system for spoken dialog challenge, Spoken Language Technology Workshop (SLT), 2012 IEEE.

Lee, Sungjin and Eskenazi, Maxine, Incremental sparse bayesian method for online dialog strategy learning, IEEE Journal of Selected Topics in Signal Processing.

Lee, Sungjin and Eskenazi, Maxine, An unsupervised approach to user simulation: toward self-improving dialog systems, Proceedings of the 13th Annual Meeting of the Special Interest Group on Discourse and Dialogue.

Black, Alan W and Eskenazi, Maxine, Future directions in spoken dialog systems: a community of possibilities, NAACL-HLT Workshop on Future directions and needs in the Spoken Dialog Community: Tools and Data.

Raux, Antoine and Eskenazi, Maxine, Optimizing the turn-taking behavior of task-oriented spoken dialog systems, ACM Transactions on Speech and Language Processing (TSLP).

2011

Black, Alan W and Burger, Susanne and Conkie, Alistair and Hastie, Helen and Keizer, Simon and Lemon, Oliver and Merigaud, Nicolas and Parent, Gabriel and Schubiner, Gabriel and Thomson, Blaise and others, Spoken dialog challenge 2010: Comparison of live and control test results, Proceedings of the SIGDIAL 2011 Conference.

Skory, Adam and Eskenazi, Maxine, Generation of educational content through Gameplay, Speech and Language Technology in Education.

Saz, Oscar and Eskenazi, Maxine, Identifying confusable contexts for automatic generation of activities in second language pronunciation training, Speech and Language Technology in Education.

Parent, Gabriel and Eskenazi, Maxine, Speaking to the crowd: looking at past achievements in using crowdsourcing for speech and predicting future challenges, Twelfth Annual Conference of the International Speech Communication Association.

Lopes, Jose and Eskenazi, Maxine and Trancoso, Isabel, Towards choosing better primes for spoken dialog systems, Automatic Speech Recognition and Understanding (ASRU), 2011 IEEE Workshop.

Rosa, Kevin Dela and Eskenazi, Maxine, Impact of Word Sense Disambiguation on Ordering Dictionary Definitions in Vocabulary Learning Tutors., Proceedings of the Twenty-Fourth International Florida Artificial Intelligence Research Society Conference.

Dela Rosa, Kevin and Eskenazi, Maxine, Self-assessment of motivation: explicit and implicit indicators in 12 vocabulary learning, Artificial Intelligence in Education.

Rosa, Kevin Dela and Eskenazi, Maxine, Effect of word complexity on 12 vocabulary learning, Proceedings of the 6th Workshop on Innovative Use of NLP for Building Educational Applications.

Correia, Rui and Pellegrini, Thomas and Eskenazi, Maxine and Trancoso, Isabel and Baptista, Jorge and Mamede, Nuno, Listening comprehension games for Portuguese: exploring the best features, Speech and Language Technology in Education.

2010

R Correia, J Baptista, N Mamede, I Trancoso, M Eskenazi, 2010, Automatic generation of cloze question distractors, Proceedings of the Interspeech 2010 Satellite Workshop on Second Language Learning.

Skory, Adam and Eskenazi, Maxine, Automatic Selection of Collocations for Instruction, Second Language Studies: Acquisition, Learning, Education and Technology.

Skory, Adam and Eskenazi, Maxine, Predicting cloze task quality for vocabulary training, Proceedings of the NAACL HLT 2010 Fifth Workshop on Innovative Use of NLP for Building Educational Applications.

Parent, Gabriel and Eskenazi, Maxine, Toward better crowdsourced transcription: Transcription of a year of the let's go bus information system data, Spoken Language Technology Workshop (SLT), 2010 IEEE.

Parent, Gabriel and Eskenazi, Maxine, Lexical entrainment of real users in the let's go spoken dialog system, Eleventh Annual Conference of the International Speech Communication Association.

Parent, Gabriel and Eskenazi, Maxine, Clustering dictionary definitions using amazon mechanical turk, Proceedings of the NAACL HLT 2010 Workshop on Creating Speech and Language Data with Amazon's Mechanical Turk.

Lopes, Jose and Trancoso, Isabel and Correia, Rui and Pellegrini, Thomas and Meinedo, Hugo and Mamede, Nuno and Eskenazi, Maxine, Multimedia learning materials, Spoken Language Technology Workshop (SLT), 2010 IEEE.

Heilman, Michael and Collins-Thompson, Kevyn and Callan, Jamie and Eskenazi, Maxine and Juffs, Alan and Wilson, Lois, Personalization of reading passages improves vocabulary acquisition, International Journal of Artificial Intelligence in Education.

Rosa, Kevin Dela and Parent, Gabriel and Eskenazi, Maxine, Multimodal learning of words: A study on the use of speech synthesis to reinforce written text in L2 language learning, Proceedings of the 2010 ISCA Workshop on Speech and Language Technology in Education.

Correia, Rui and Baptista, Jorge and Mamede, Nuno and Trancoso, Isabel and Eskenazi, Maxine, Automatic generation of cloze question distractors, Proceedings of the Interspeech 2010 Satellite Workshop on Second Language Studies: Acquisition, Learning, Education and Technology, Waseda University, Tokyo, Japan.

2009

Raux, A., Eskenazi, M., 2009, A Finite-State Turn-Taking Model for Spoken Dialog Systems, Proceedings NAACL-HLT09 – Colorado.

Pino, Juan and Eskenazi, Maxine, An application of latent semantic analysis to word sense discrimination for words with related and unrelated meanings, Proceedings of the Fourth Workshop on Innovative Use of NLP for Building Educational Applications.

Pino, Juan and Eskenazi, Maxine, Measuring Hint Level in Open Cloze Questions., FLAIRS Conference.

Pino, Juan and Eskenazi, Maxine, Semi-automatic generation of cloze question distractors effect of students' L1., SLaTE.

Marujo, Luis and Lopes, Jose and Mamede, Nuno and Trancoso, Isabel and Pino, Juan and Eskenazi, Maxine and Baptista, Jorge and Viana, Ceu, Porting REAP to European Portuguese, International Workshop on Speech and Language Technology in Education.

Gonzalez-Brenes, Jose P and Black, Alan W and Eskenazi, Maxine, Describing spoken dialogue systems differences, International Workshop on Spoken Dialogue Systems, Irsee, Germany. Springer—Verlat.

Eskenazi, Maxine, An overview of spoken language technology for education, Speech Communication.

Black, Alan W and Eskenazi, Maxine, The spoken dialogue challenge, Proceedings of the SIGDIAL 2009 Conference: The 10th Annual Meeting of the Special Interest Group on Discourse and Dialogue.

<u>2008</u>

Eskenazi, M., Black, A., Raux, A. and Langner, B., 2008, Let's Go Lab: a platform for evaluation of spoken dialog systems with real world users, Interspeech 2008, Brisbane, Australia.

Raux, A., Eskenazi, M. (2008) Optimizing Endpointing Thresholds using Dialogue Features in a Spoken Dialogue System, , SIGdial 2008, Columbus, OH, USA.

Heilman, M., Collins-Thompson, K., and Eskenazi, M. (2008) An Analysis of Statistical Models and Features for Reading Difficulty Prediction. The 3rd Workshop on Innovative Use of NLP for Building Educational Applications. Association for Computational Linguistics.

Pino, J., Heilman, M. and Eskenazi, M. (2008) A Selection Strategy to Improve Cloze Question Quality. Proceedings of the Workshop on Intelligent Tutoring Systems for Ill-Defined Domains. 9th International Conference on Intelligent Tutoring Systems.

Heilman, M., Zhao, L., Pino, J., and Eskenazi, M. (2008) Retrieval of Reading Materials for Vocabulary and Reading Practice. The 3rd Workshop on Innovative Use of NLP for Building Educational Applications. Association for Computational Linguistics.

Kulkarni, A., Heilman, M., Eskenazi, M., and Callan, J. (2008) Word Sense Disambiguation for Vocabulary Learning. Ninth International Conference on Intelligent Tutoring Systems.

<u>2007</u>

Raux, A., Eskenazi, M. (2007) A Multi-Layer Architecture for Semi-Synchronous Event-Driven Dialogue Management, ASRU 2007, Kyoto, Japan.

Ai, H., Raux, A., Bohus, D., Eskenazi, M., and Litman, D. (2007) *Comparing Spoken Dialog Corpora Collected with Recruited Subjects versus Real Users*, 8th SIGDial Workshop on Discourse and Dialogue, Antwerp, Belgium.

Bohus, D., Raux, A., Harris, T., Eskenazi, M., Rudnicky, A. (2007) *Olympus: an open-source framework for conversational spoken language interface research*, HLT-NAACL 2007 workshop on Bridging the Gap: Academic and Industrial Research in Dialog Technology, Rochester, NY, USA.

Kulkarni, A., Callan, J., & Eskenazi, M. (2007) Dictionary Definitions: The Likes and the Unlikes. Proceedings of the SLaTE Workshop on Speech and Language Technology in Education.

Heilman, M. & Eskenazi, M. (2007). Application of Automatic Thesaurus Extraction for Computer Generation of Vocabulary Questions. *Proceedings of the SLaTE Workshop on Speech and Language Technology in Education*.

Heilman, M., Collins-Thompson, K., Callan, J., and Eskenazi, M. (2007). Combining Lexical and Grammatical Features to Improve Readability Measures for First and Second Language Texts. *Proceedings of the Human Language Technology Conference*. Rochester, NY.

2006

Bohus, D., Langner, B., Raux, A., Black, A., Eskenazi, M., Rudnicky, A. (2006) *Online Supervised Learning of Non-understanding Recovery Policies*, SLT 2006, Palm Beach, Aruba.

Juffs, A., Eskenazi, M., Wilson, L., Pelletreau, T., Samders, J., Callan, J., Brown, J., 2006, Promoting robust learning of vocabulary through computer assisted language learning, Proc. Joint conference of AAAL and ACLA/CAAL 2006, Montreal, June 2006.

13) Brown, J., Eskenazi, M., 2006, Using Simulated Students for the Assessment of Authentic Document Retrieval, ITS2006, Taiwan, June 2006. **Lecture Notes in Computer Science,** Editors: Mitsuru Ikeda, Kevin D. Ashley, Tak-Wai Chan, Publisher: Springer Berlin Heidelberg, pp. 685 – 688. http://dx.doi.org/10.1007/11774303-68

Heilman, M., Eskenazi, M., 2006, Language Learning: Challenges for Intelligent Tutoring Systems, Workshop on Ill-defined Domains in Intelligent Tutoring, Taiwan, June 2006.

Heilman, M., Collins-Thompson, K., Callan, J., Eskenazi, M., 2006, Classroom Success of an Intelligent Tutoring System for Lexical Practice and Reading Comprehension, Proc. Interspeech2006, Pittsburgh September 2006.

Raux, A., Bohus, D., Langner, B., Black, A., Eskenazi, M., 2006, Doing Research on a Deployed Spoken Dialogue System: One Year of Let's Go! Experience, Proc. Interspeech 2006, Pittsburgh, September 2006.

2005

Brown, J., Frishkoff,, G., Eskenazi, M. 2005, "Automatic question generation for vocabulary assessment." In *Proceedings of HLT/EMNLP 2005*. Vancouver, B.C.

Brown, J., Eskenazi, M., 2005, "Student, text, and curriculum modeling for reader-specific document retrieval", Proc. IASTED International Conference on Human-Computer Interaction 2005, Phoenix, AZ.

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