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

Principal Systems Scientist Carnegie Mellon University (2010-)

Director, Dialog Research Center at Carnegie Mellon (2011 -)

Language Technologies Institute Faculty Fellowship (2005-2007)

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 (1984 - 1994)

Publications and products

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

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, SIGDIAL 2017.

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

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

Tiancheng Zhao, Alan W Black, Maxine Eskenazi, An incremental turn-taking model with active system barge-in for spoken dialog systems, Proc SIGDIAL 2015.

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

Elliot Schumacher, Kevyn Collins-Thompson, Gwen Frishkoff and Maxine Eskenazi, 2016, Predicting the Relative Difficulty of Single Sentences With and Without Surrounding Context, EMNLP2016.

Lopes, J., Eskenazi, M., Trancoso, I., 2015, From rule-based to data-driven lexical entrainment models in spoken dialog systems, Computer Speech and Language, 31 (1), 87-112.

Black. A., Eskenazi, M., 2014, Real Users and Real Dialog Systems: the Hard Challenge for SDS, in Natural Interaction with Robots, Knowbots and Smartphones: Putting Spoken Dialog Systems into Practice, eds J Mariani, S Rosset, M Garnier-Rizet, L Devillers, Springer, p. 29-36.

Pellow, D., Eskenazi, M., 2014, Tracking Human Process Using Crowd Collaboration to Enrich Data, HCOMP2014.

Sungjin Lee, Maxine Eskenazi, 2013, <u>Recipe For Building Robust Spoken Dialog State Trackers: Dialog State Tracking Challenge System Description</u>, Proc SIGDIAL 13.

Eskenazi, M., Lin, Y., Saz, O., 2013, Tools for non-native readers: the case for translation and simplification, Proceedings of the Workshop on Natural Language Processing for Improving Textual Accessibility, NAACL2013, Atlanta, p.20-28

Sungjin Lee, Maxine Eskenazi, 2012, <u>Incremental sparse bayesian method for online dialog strategy</u> learning, IEEE Journal of Selected Topics in Signal Processing 6 (8), 903-916.

Parent, G. and Eskenazi, M. 2010. Toward better crowdsourced transcription: transcription of a year of the Let's Go bus information system data, Proceedings SLT 2010, Berkeley.

Parent, G. and Eskenazi, M. 2010. Clustering dictionary definitions using Amazon Mechanical Turk, Proc. NAACL/HLT workshop on Creating Speech and Language Data with Amazon's Mechanical Turk.

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.

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.

Dela Rosa, K., Eskenazi, M., 2011, Effect of Word Complexity on L2 Vocabulary Learning, Proceedings of the 49th Annual Meeting of the Association for Computational Linguistics: Human Language Technologies's 6th Workshop on Innovative Use of NLP for Building Educational Applications (ACL-HLT: BEA 2011). 2011.

Eskenazi, M., 2009, An overview of spoken language technology for education, Speech Communication, Elsevier, vol 51 issue 10 p. 832-844

Eskenazi. M., 1993, Trends in speaking styles research, **Keynote speech**, Proc. ESCA Eurospeech, Berlin.

Synergistic Activities

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

Developed the Let's Go research platform where researchers from around the world have run studies in spoken dialog research

Director of the Dialog Research Center - use of its products (database, software, research platform) has spawned over 250 non-CMU publications over four years

Creator and first Chair (and organizer of first workshop) SLaTE (Spoken Language Technologies for Education) special interest group

Let's Go database - over 220,000 spoken dialogs, logfiles and partial transcription - publicly available.