

Marisa Ferrara Boston

Education

- 2008–present **PhD, Linguistics**, *Cornell University, Ithaca, NY*.
Concentrations in computational linguistics and cognitive science.
Committee Chair: Dr. John T. Hale.
Thesis title: Locality, non-projectivity, and human sentence processing.
Advanced to candidacy: May, 2009.
- 2005–2008 **Graduate Study, Linguistics and Cognitive Science**, *Michigan State University, East Lansing, MI*.
Advisor: Dr. John T. Hale
- 2002–2005 **MA, Linguistics**, *Eastern Michigan University, Ypsilanti, MI*.
- 2004–2005 **Certificate in Language Technology**, *Eastern Michigan University, Ypsilanti, MI*.
- 1999–2001 **BA with Honors, Individualized Studies**, *Eastern Michigan University, Ypsilanti, MI*.
Concentrations in cultural diversity, languages, and TESOL.

Experience

Research Experience

- 2009–2010 **Sage Research Fellow**, *Cornell University, Ithaca, NY*.
Implementing locality in a dependency parser to evaluate grammatical and processing effects of islands (in preparation for dissertation).
Supervised by Dr. John T. Hale.
- 2008–2009 **Graduate Research Assistant**, *Cornell University, Ithaca, NY*.
Evaluated probabilistic and working memory syntactic complexity metrics on human behavioral data.
Supervised by Dr. John T. Hale.
- 2005–2008 **IGERT Interdisciplinary Cognitive Science Research Fellow**, *Michigan State University, East Lansing, MI*.
Developed a dependency parser suitable for modeling human sentence processing data.
Supervised by Dr. John T. Hale.
- 2005–2006 **Cognitive Science Research Assistant**, *Michigan State University, East Lansing, MI*.
Implemented a human sentence processing model of garden path phenomena.
Supervised by Dr. John T. Hale.
- 2002–2005 **LINGUIST List Research Assistant**, *Eastern Michigan University, Ypsilanti, MI*.
Managed publications and designed interfaces for the LINGUIST List website.
Supervised by Dr. Helen Aristar-Dry and Dr. Anthony Aristar.
- 2001 **Undergraduate Research Assistant**, *Eastern Michigan University, Ypsilanti, MI*.
Assisted the coordinator of the national conference, “Integrity and inclusion: Diversity in the academic curriculum and beyond.”.
Supervised by Dr. Liza Cerroni-Long.

Teaching Experience

- 2010 **Guest Lecturer, Minimal Structure and Rational Behavior: Competence and Performance in Linguistic Theory**, *University of Michigan*, Ann Arbor, MI.
Will lecture in interdisciplinary graduate seminar taught by Dr. Sam Epstein (linguistics) and Dr. Richard Lewis (psychology).
- 2008 **Guest Lecturer, LING 4424 Intro to Computational Linguistics**, *Cornell University*, Ithaca, NY.
Lectured in undergraduate course taught by Dr. John Hale.
- 2007 **Course Assistant, LIN 401 Intro to Linguistics**, *Michigan State University*, East Lansing, MI.
Created and graded assignments, examinations, and lectures.
- 2001 **Classroom teacher**, *St. Mary's Adult ESL Program*, Painesville, OH.
Instructed adult immigrants of varying skill levels in English conversation and grammar.
- 2000–2001 **ESL, Spanish, and French tutor**, *Eastern Michigan University*, Ypsilanti, MI.
Tutored individual university students.

Additional Experience

- 2004–2005 **Programmer**, *The LINGUIST List*, Ypsilanti, MI.
Implemented and designed interfaces for the LINGUIST List website and the E-MELD project.
- 2002–2004 **Publications Manager**, *The LINGUIST List*, Ypsilanti, MI.
Managed publications finances and support; maintained the website publications area.

Grants and Awards

- 2009–2010 **Sage Fellowship**, *Cornell University*.
- 2008–2009 **Graduate Research Assistantship**, *Cornell University*.
- 2008 **Summer Research Fellowship**, *Michigan State University*.
- 2008 **Graduate School Travel Award**, *Michigan State University*.
Association for Computational Linguistics Annual Meeting. Columbus, OH.
- 2008 **Department Travel Award**, *Michigan State University*.
CUNY Human Sentence Processing Conference 2008. Chapel Hill, NC.
- 2007 **Graduate School International Travel Award**, *Michigan State University*.
AMLaP 2007 Psycholinguistics Conference. Turku, Finland.
- 2007 **Research Enhancement Award**, *Michigan State University*.
- 2005–2008 **NSF-funded IGERT Cognitive Science Fellowship**, *Michigan State University*.
- 2003–2004 **Distinguished Graduate Student in Linguistics**, *Eastern Michigan University*.
- 2001 **Graduated Summa Cum Laude with Departmental Honors**, *Eastern Michigan University*.

Publications

Marisa Ferrara Boston, John T. Hale, Shravan Vasishth, and Reinhold Kliegl. Parallel processing and sentence comprehension difficulty. *Language and Cognitive Processes*, Submitted.

Marisa Ferrara Boston, John T. Hale, and Marco Kuhlmann. Dependency structures derived

from Minimalist Grammars. In *Proceedings of Mathematics of Language 11*, pages 11–20, 2009.

Marisa Ferrara Boston, John T. Hale, Reinhold Kliegl, and Shravan Vasishth. Surprising parser actions and reading difficulty. In *Proceedings of ACL-08: HLT Short Papers*, pages 5–8, 2008.

Marisa Ferrara Boston and Zhong Chen. Multilingual feature selection for a human sentence processing model. In *Proceedings of the Midwest Computational Linguistics Colloquium*, East Lansing, MI, 2008. Midwest Computational Linguistics Colloquium.

Marisa Ferrara Boston, John T. Hale, Umesh Patil, Reinhold Kliegl, and Shravan Vasishth. Parsing costs as predictors of reading difficulty: An evaluation using the Potsdam Sentence Corpus. *Journal of Eye Movement Research*, 2(1):1–12, 2008.

Marisa Ferrara Boston and John T. Hale. Garden-pathing in a statistical dependency parser. In *Proceedings of the Midwest Computational Linguistics Colloquium*, West Lafayette, IN, 2007. Midwest Computational Linguistics Colloquium.

Marisa A. Ferrara. Metaphors for love in Standard Italian. Master's thesis, Eastern Michigan University, 2005.

Marisa Ferrara and Steven Moran. A review of DBMS for linguistic purposes. In *E-MELD 2004 Proceedings*, 2004.

Marisa A. Ferrara. Barely understood: A qualitative ethnic analysis of midwestern women's opinions regarding nudity in advertising. Undergraduate Thesis, Eastern Michigan University, 2001.

Conference Presentations

- 2009 **Dependency structures derived from Minimalist Grammars**, *Marisa Ferrara Boston, John T. Hale, and Marco Kuhlmann*.
Mathematics of Language conference. August 20-21, 2009. Bielefeld, Germany.
- 2009 **Examining syntactic factors in eye fixation durations**, *Marisa Ferrara Boston, John T. Hale, Shravan Vasishth, and Reinhold Kliegl*.
Poster, CUNY Human Sentence Processing Conference. March 26-28, 2009. Davis, CA.
- 2009 **The interaction of surprisal and working memory cost during reading**, *Umesh Patil, Marisa Ferrara Boston, Shravan Vasishth, John Hale, and Reinhold Kliegl*.
Poster, CUNY Human Sentence Processing Conference. March 26-28, 2009. Davis, CA.
- 2009 **Using entropy to evaluate child language performance**, *Zhong Chen, Marisa Ferrara Boston, and John T. Hale*.
Poster, CUNY Human Sentence Processing Conference. March 26-28, 2009. Davis, CA.
- 2008 **Surprising parser actions and reading difficulty**, *Marisa Ferrara Boston, John T. Hale, Reinhold Kliegl, and Shravan Vasishth*.
Poster, ACL08:HLT. June 15-18, 2008. Columbus, OH.
- 2008 **Multilingual feature selection in a human sentence processing model**, *Marisa Ferrara Boston and Zhong Chen*.
Midwest Computational Linguistics Conference (MCLC) 5. May 10-11, 2008. East Lansing, MI.
- 2008 **Surprisal is useful for modeling gaze duration and regression probability**, *Shravan Vasishth, Marisa Ferrara Boston, Umesh Patil, Reinhold Kliegl, and John T. Hale*.
Poster, 21st Annual CUNY Conference on Human Sentence Processing. March 13-15, 2008. Chapel Hill, NC.
- 2008 **Modeling garden paths in a statistical dependency parser: Chinese, German, and English**, *Marisa Ferrara Boston and Zhong Chen and John T. Hale*.
Poster, 21st Annual CUNY Conference on Human Sentence Processing. March 13-15, 2008. Chapel Hill, NC.

- 2007 **Italian long distance anaphors in Dynamic Predicate Logic**, *Marisa Ferrara Boston*.
2nd Annual Midwestern Workshop on Semantics. October 6, 2007. East Lansing, MI.
- 2007 **Garden-pathing in a statistical dependency parser**, *Marisa Ferrara Boston and John T. Hale*.
Poster, 13th Annual Conference of Architectures and Mechanisms for Language Processing (AMLaP). August 24-28, 2007. Turku, Finland.
- 2007 **Integrating sentence processing theory with eye-movement control models**,
Shravan Vasishth, Marisa Ferrara Boston, Umesh Patil, John T. Hale, and Reinhold Kliegl.
Poster, 13th Annual Conference of Architectures and Mechanisms for Language Processing (AMLaP). August 24-28, 2007. Turku, Finland.
- 2007 **Integrating sentence processing theory with eye-movement control models**,
Shravan Vasishth, Marisa Ferrara Boston, Umesh Patil, John T. Hale, and Reinhold Kliegl.
Poster, 14th European Conference on Eye Movements (ECEM). August 19-23, 2007. Potsdam, Germany.
- 2007 **Garden-pathing in a statistical dependency parser**, *Marisa Ferrara Boston and John T. Hale*.
Midwest Computational Linguistics Conference (MCLC) 4. April 28, 2007. West Lafayette, IN.
- 2005 **Metaphors for love in Standard Italian**, *Marisa Ferrara*.
Eastern Michigan University Graduate Research Fair. March 28, 2005. Ypsilanti, MI.
- 2005 **Metaphors for love in Standard Italian**, *Marisa Ferrara*.
Michigan Academy of Sciences, Arts, and Letters Annual Meeting. March 4-5, 2005. Ypsilanti, MI.
- 2005 **Review of DBMS for linguistic purposes**, *Marisa Ferrara and Steven Moran*.
Poster, Linguistics Society of America Annual Meeting 2005. January 6-9, 2005. San Francisco, CA.
- 2004 **Review of DBMS for linguistic purposes**, *Marisa Ferrara and Steven Moran*.
E-MELD 2004 Workshop. July 15-18, 2004. Detroit, MI.
- 2004 **Collecting linguistic data: The case of Tigrinya**, *Marisa Ferrara*.
Eastern Michigan University Graduate Research Fair. March 25, 2004. Ypsilanti, MI.
- 2002 **Barely understood: A qualitative ethnic analysis of Midwestern women's opinions regarding nudity in advertising**, *Marisa Ferrara*.
Michigan Academy of Sciences, Arts, and Letters Annual Meeting. March 1-2, 2002. Mt. Pleasant, MI.

Invited Presentations

- 2009 **Ranked parallel dependency parsing and human comprehension difficulty**,
University of Potsdam.
January 14, 2009. Potsdam, Germany.
- 2008 **Ranked parallel dependency parsing and human comprehension difficulty**,
University of Uppsala.
December 10, 2008. Uppsala, Sweden.
- 2008 **Garden-pathing and surprisal in a statistical dependency parser**, *Open-source dependency toolkit workshop.*, Copenhagen Business School.
July 14, 2008. Copenhagen, Denmark.

- 2007 **Garden-pathing and surprisal in a statistical dependency parser**, *University of Potsdam*.
June 28, 2007. Potsdam, Germany.
- 2007 **Garden-pathing and surprisal in a statistical dependency parser**, *The LINGUIST List*, Eastern Michigan University.
June 22, 2007. Ypsilanti, MI.

Software

- HumDep An incremental dependency parser developed to model human sentence processing.
Current stable version: 3.0.
- DepPrint A dependency grammar visualizer that outputs SVG files.
Current stable version: 1.1.
- NegraToConfig A conversion tool from Negra treebank format to dependencies to Nivre parser configurations.
- ChineseToConfig A conversion tool from Chinese Penn Treebank format to dependencies to Nivre parser configurations.

Skills

Natural languages

Bilingual in English and Novarese (a Gallo-siculo Sicilian dialect), near fluent in Italian, formal study in French, conversational in Spanish.

Programming languages

Java, ML, ColdFusion, XML, XSLT.

Technical skills

SQL, Unix, Emacs, \LaTeX .

Memberships

Linguistics Society of America (LSA)
Association for Computational Linguistics (ACL)

Other Interests

Certified private pilot (Single Engine Land)
Avid runner