

Fatemeh Torabi Asr

Department of Psychology and Brain Sciences
Indiana University, Bloomington, IN, USA
fatorabi@indiana.edu

EDUCATION

PhD, Computer Science (2011 – 2015)

Saarland University, Saarbrücken, Germany.

Thesis title: “*An information theoretic approach to production and comprehension of discourse markers*”

* With great honor (*Magna cum laude*)

Computational Linguistics Fall School DGfS (Aug. 2011 – Sep. 2011)

Institute for Computational Linguistics, University of Zürich (UZH), Switzerland.

M.Sc. Computer Science & Engineering, major in Software (2007 – 2010)

Shiraz University, Shiraz, Iran.

Thesis title: “*A Computational Model of Syntactic Category Learning in Children*”

* First rank among students of the class 2007

B.Sc. Computer Science & Engineering, major in Software (2003 – 2007)

Shiraz University, Shiraz, Iran.

Project title: “*A Study on Artificial Intelligence Game Playing*”

* First rank among students of the class 2003

EMPLOYMENT

Postdoctoral Research Associate

Department of Psychology and Brain Sciences/Cognitive Science Program, Indiana University (Dec. 2015 – Present)

Topic: Cognitive Computing & Natural Language Processing

Research Staff

Collaborative Research Center SFB 1102, Saarland University (Oct. 2014 – Nov. 2015)

Topic: Information Density and Linguistic Encoding

Research Staff

Cluster of Excellence MMCI, Saarland University (Apr. 2011 – Sep. 2014)

Topic: Human Sentence Processing and Applications in Dialog Systems

RESEARCH VISITS

University of Edinburgh, Scotland (Nov. 2014 – Dec. 2014)

Successful conduction of a set of eye-tracking reading experiments on English speakers to study the effect of information and expectation on text comprehension.

University of Potsdam, Germany (Dec. 2013 – Mar. 2014)

Successful development of an event clustering component in a UIMA annotation pipeline framework as part of the *e-Identity* project involved with analyzing large-scale news corpora — method presented at the workshop on EVENTS, ACL 2014.

TEACHING

Persian Language (2011 – 2013), Advanced Programming (2009 – 2010), File Structures (2010), Data Structures (2009)

SERVICES

Journal peer review: INFOCOMP, Discourse Processes
Conference peer review: EMNLP (2015), ESSLLI (2014, 2016), CMCL (2016)
Paneling on Persian Language Technology, Symposia Iranica, Cambridge, UK (2015)
Student volunteering at the annual meeting of the ACL, Baltimore, USA (2014)
Organization of the FEAST program at Saarland University, Germany (2012–2015)
Instruction of the Persian language at Sprachzentrum, Saarbrücken (2011–2013)
Organization of workshops for university and high-school students (2006–2010)
Administration of Sina-Khayam interdisciplinary study group (2008–2010)
Administration of the ACM programming teams at Shiraz University (2006–2008)

PUBLICATIONS

Journal articles & book chapters

F. T. Asr, A. Fazly and Z. Azimifar (2013). *“From cues to categories: a computational study of children’s early word categorization”*. Theory and applications of natural language processing: Springer-Verlag Berlin Heidelberg.

M. Samadi, **F. T. Asr**, J. Schaeffer and Z. Azimifar (2009). *“Extending the applicability of pattern and endgame databases”*. IEEE Transaction on Computational Intelligence and AI in Games.

Conference proceedings

F. T. Asr, J. A. Willits and Michael N. Jones (2016). *“Comparing predictive and co-occurrence based models of lexical semantics trained on child-directed speech”*. Proceedings of the 38nd Annual Conference of the Cognitive Science Society , Philadelphia, Pennsylvania, USA.

F. T. Asr and V. Demberg (2016). *“But vs. Although under the microscope”*. Proceedings of the 38nd Annual Conference of the Cognitive Science Society , Philadelphia, Pennsylvania, USA.

F. T. Asr and V. Demberg (2015). *“Uniform Information Density at the level of discourse relations: negation markers and discourse connective omission”*. The 11th International Conference on Computational Semantics (IWCS), London, UK.

F. T. Asr, J. Sonntag, Y. Grishina and Manfred Stede (2014). *“Conceptual and practical steps in event coreference analysis of large-scale data”*. The 2nd Workshop on EVENTS: Definition, Detection, Coreference, and Representation at ACL, Baltimore, USA.

F. T. Asr and V. Demberg (2013). *“On the information conveyed by discourse markers”*. Workshop on Cognitive Modeling and Computational Linguistics at ACL, Sofia, Bulgaria.

F. T. Asr and V. Demberg (2012). “*Implicitness of discourse relations*”. 24th International Conference on Computational Linguistics (Coling), Bombay, India.

F. T. Asr and V. Demberg (2012). “*Measuring the strength of linguistic cues for discourse relations*”. Workshop on Advances in Discourse Analysis and its Computational Aspects (ADACA) , Bombay, India.

F. T. Asr, A. Fazly and Z. Azimifar (2010). “*The effect of word-internal properties on syntactic categorization: a computational modeling approach*”. Proceedings of the 32nd Annual Conference of the Cognitive Science Society , Portland, USA.

M. Samadi, J. Schaeffer, **F. T. Asr**, M. Samar and Z. Azimifar (2008). “*Using abstraction in two-player games*”. 18th Conference on Artificial Intelligence, Patras, Greece.

M. Samadi, **F. T. Asr**, Z. Azimifar and M. Z. Jahromi (2008). “*Separating the factors of the optimal solution in chess* ”. 13th Annual Conference of Computer Society of Iran, Kish Island, Iran.

Conference abstracts

V. Demberg, **F. T. Asr**, H. Rohde and M. Scholman (2015). “*Discourse expectations raised by contrastive connectives*”. Conference on Discourse Expectations: Theoretical, Experimental, and Computational Perspectives (DETEC), Edmonton, Canada.

F. T. Asr (2015). “*Colloquial Persian in discourse and dialogue*”. At the panel on Formal vs. Colloquial Persian from a Language Technology Perspective, the second biennial Symposia Iranica 2015, Cambridge, UK.

F. T. Asr and V. Demberg (2015). “*A discourse connector’s distribution determines its interpretation*”. The CUNY Conference on Human Sentence Processing 2015, Los Angeles, California, USA.

F. T. Asr and V. Demberg (2015). “*A distributional account of discourse connectives and its effect on fine-grained inferences*”. Text-link Conference, Louvain, Belgium.

F. T. Asr and V. Demberg (2014). “*Information density and the use of discourse cues*”. Conference on the Architecture and Mechanism for Language Processing (AMLaP), Edinburgh, Scotland.

F. T. Asr and V. Demberg (2013). “*Can neighboring relations help to anticipate upcoming discourse relations?*”. Conference on the Architecture and Mechanism for Language Processing (AMLaP), Marseille, France.

F. T. Asr and V. Demberg (2012). “*Tendency for causality in implicit discourse relations*”. Corpus-Assisted Discourse Analysis (CADSConf) , Bologna, Italy.

F. T. Asr and V. Demberg (2012). “*Discourse expectations and implicitness of (causal) discourse relations*”. Conference on the Architecture and Mechanism for Language Processing (AMLaP), Trento, Italy.

F. T. Asr, A. Fazly and Z. Azimifar (2011). “*Simulation of a psychological experiment in a computational framework*”. 4th International Conference of Cognitive Science, Tehran, Iran.

F. T. Asr, Z. Azimifar and A. Fazly (2009). “*A statistical modeling approach for child syntax acquisition*”. 3rd International Conference of Cognitive Science, Tehran, Iran.

INVITED TALKS

* Presentations at conferences and home university are omitted.

“Insights into human discourse as information communication”. Invited talk at Clippers, Department of Linguistics, Ohio State University, Columbus, USA (April 2016)

“Discourse connectives from an information theoretical perspective”. Invited talk at the DRP Meeting, Department of Languages, Literature and Communication, Universiteit Utrecht, Utrecht, Netherlands (April 2015)

“Uniform information density at the level of discourse relations”. Invited talk at the MODERN meeting, Utrecht Institute of Linguistics OTS, Universiteit Utrecht, Utrecht, Netherlands (April 2015)

“Approaching event analysis in large-scale data”. Tech talk at Amazon, Aachen, Germany (June 2015)

“A computational psycholinguistic study of the discourse markers”. Invited talk at the Computational Linguistics Colloquium, Department of Linguistics, Universitaet Potsdam (Jan 2014)

HONORS

Young Scientist Travel Award (2016)

To attend the Annual Meeting of the Cognitive Science Society.

From: Indiana University Cognitive Science Program and the National Science Foundation

COST Action IS1312 Early Career Researcher financial support (2014)

To start collaboration between Saarland University and the University of Utrecht (together with Dr. Vera Demberg for two individual visits of Prof. Ted Sanders)

From: European Cooperation in Science and Technology

Don and Betty Walker international student travel award (2014)

From: Association for Computational Linguistics

Direct entrance award: admission without exam to the M.Sc. program (2007)

From: Shiraz University

Honorable mention in the regional ACM programming competitions (Tehran site) as a team contestant/coach for 3 years (2005 – 2007)

From: IBM and Sharif University of Technology