

# Şeniz Demir

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RESEARCH INTERESTS	Natural Language Generation/Processing, Accessibility Systems, Dialogue Management, and Artificial Intelligence
EDUCATION	<p><b>University of Delaware</b>, Newark, DE USA</p> <p>PhD, Computer Science 2004-2010</p> <ul style="list-style-type: none"><li>• Thesis: <i>SIGHT for Visually Impaired Users: Summarizing Information Graphics Textually</i></li><li>• Advisors: <i>Sandra Carberry and Kathleen F. McCoy</i></li><li>• GPA: 3.86</li></ul> <p><b>Bogazici University</b>, Istanbul TURKEY</p> <p>PhD (degree not earned), Computer Engineering, 2003-2004</p> <p>MSc, Computer Engineering, 2000-2003</p> <ul style="list-style-type: none"><li>• Thesis: <i>Improved Treatment of Word Meaning in a Turkish Conversational Agent</i></li><li>• Advisor: <i>A. C. Cem Say</i></li><li>• GPA: 3.75</li></ul> <p><b>Marmara University</b>, Istanbul TURKEY</p> <p>BSc, Computer Engineering, 1996-2000</p> <ul style="list-style-type: none"><li>• GPA: 3.58 (with High Honors)</li></ul>
ACADEMIC EXPERIENCE	<p><b>University of Delaware</b>, Dept. of Computer and Information Sciences</p> <p><i>Research &amp; Teaching Assistant</i> <b>2004-2009</b></p> <p><b>Yeditepe University</b>, Dept. of Computer Engineering</p> <p><i>Research &amp; Teaching Assistant</i> <b>2000-2004</b></p> <p><b>Marmara University</b>, Dept. of Computer Engineering</p> <p><i>Student Assistant</i> <b>1997-2000</b></p>
JOURNAL PUBLICATIONS	<p><b>Şeniz Demir</b>, David Oliver, Edward Schwartz, Sandra Carberry, Stephanie Elzer, Kathleen F. McCoy, and Daniel Chester. “<i>Interactive SIGHT: Textual Access to Simple Bar Charts</i>”, <i>The New Review of Hypermedia and Multimedia</i>, Special Issue: Web Accessibility, 16(3), pp. 245–279, 2010. (SCI-Expanded)</p> <p><b>Şeniz Demir</b>, Sandra Carberry, and Kathleen F. McCoy. “<i>Summarizing Information Graphics Textually</i>”, <i>Computational Linguistics</i>, 38(3), 2012, to appear. (SCI)</p> <p>Sandra Carberry, Stephanie Elzer, Kathleen F. McCoy, <b>Şeniz Demir</b>, Peng Wu, Charles Greenbacker, Daniel Chester, Edward Schwartz, and David Oliver. “<i>Access to Multimodal Articles for Individuals with Sight Impairments</i>”, Under 2nd round review at <i>ACM Transactions on Interactive Intelligent Systems</i>.</p>

- BOOK CHAPTERS Stephanie Elzer, Edward Schwartz, Sandra Carberry, Daniel Chester, **Seniz Demir**, and Peng Wu. “*Bar Charts in Popular Media: Conveying Their Message to Visually Impaired Users via Speech*”, Studies in Computational Intelligence Series, Advances in Intelligent Information Systems, Springer, Volume 265, pp. 275-298, 2010.
- Seniz Demir**, Sandra Carberry, and Stephanie Elzer. “*Issues in Realizing the Overall Message of a Bar Chart*”, Recent Advances in Natural Language Processing, John Benjamins, Volume 5, pp. 311-320, 2009.
- Sandra Carberry, Stephanie Elzer, Richard Burns, Peng Wu, Daniel Chester, and **Seniz Demir**. “*Information Graphics in Multimodal Documents*”, Multimedia Information Extraction, AAAI/MIT Press, to appear.
- CONFERENCE PUBLICATIONS **Seniz Demir**, Ilknur Durgar El-Kahlout, Erdem Unal, and Hamza Kaya. “*Turkish Paraphrase Corpus*”, In Proc. of LREC’2012.
- Charles Greenbacker, Peng Wu, Sandra Carberry, Kathleen F. McCoy, Stephanie Elzer, David McDonald, Daniel Chester, and **Seniz Demir**. “*Improving the Accessibility of Line Graphs in Multimodal Documents*”, In Proc. of EMNLP’2011 Workshop on Speech and Language Processing for Assistive Technologies (SLPAT).
- Seniz Demir**, David Oliver, Edward Schwartz, Sandra Carberry, Stephanie Elzer, and Kathleen F. McCoy. “*Interactive SIGHT Demo: Textual Summaries of Simple Bar Charts*”, Demo Paper, In Proc. of Assets’2010, pp. 267-268. (also appeared in NAACL-HLT’2010 Workshop on Speech and Language Processing for Assistive Tech.)
- Seniz Demir**, Sandra Carberry, and Kathleen F. McCoy. “*A Discourse-Aware Graph-Based Content-Selection Framework*”, in Proc. of INLG’2010, pp. 17-25.
- Seniz Demir**, David Oliver, Edward Schwartz, Sandra Carberry, Stephanie Elzer, and Kathleen F. McCoy. “*Interactive SIGHT into Information Graphics*”, in Proc. of W4A’2010.
- Seniz Demir**. “*TAIG: Textually Accessible Information Graphics*”, Extended Abstract, In Proc. of ASSETS’2008. pp. 313-314.
- Seniz Demir**, Sandra Carberry, and Kathleen F. McCoy. “*Generating Textual Summaries of Bar Charts*”, In Proc. of INLG’2008, pp. 7-15.
- Stephanie Elzer, Edward Schwartz, Sandra Carberry, Daniel Chester, **Seniz Demir**, and Peng Wu. “*Accessible Bar Charts for Visually Impaired Users*”, In Proc. of TELEHEALTH/AT’2008, pp. 55-60.
- Seniz Demir**, Sandra Carberry, and Stephanie Elzer. “*Effectively Realizing the Inferred Message of an Information Graphic*”, In Proc. of RANLP’2007, pp. 150-156. (Acceptance Rate: 12% for full papers)
- Stephanie Elzer, Edward Schwartz, Sandra Carberry, Daniel Chester, **Seniz Demir**, and Peng Wu. “*A Browser Extension for Providing Visually Impaired Users Access to the Content of Bar Charts on the Web*”, In Proc. of WEBIST’2007. (Acceptance Rate: 14%)
- Sandra Carberry, Stephanie Elzer, and **Seniz Demir**. “*Information Graphics: An Untapped Resource for Digital Libraries*”, In Proc. of SIGIR’2006, pp. 581-588. (Acceptance Rate: 19%)

	Stephanie Elzer, Sandra Carberry, and <b>Seniz Demir</b> . “ <i>Communicative Signals as the Key to Automated Understanding of Simple Bar Charts</i> ”, In Proc. of DIAGRAMS’2006, pp. 25-39. (Best Paper Award)
	Stephanie Elzer, Sandra Carberry, Ingrid Zukerman, Daniel Chester, Nancy Green, and <b>Seniz Demir</b> . “ <i>A Probabilistic Framework for Recognizing Intention in Information Graphics</i> ”, In Proc. of IJCAI’2005, pp. 1042-1047. (Acceptance Rate: 18%)
	Stephanie Elzer, Sandra Carberry, Daniel Chester, <b>Seniz Demir</b> , Nancy Green, and Ingrid Zukerman. “ <i>Exploring and Exploiting the Limited Utility of Captions in Recognizing Intention in Information Graphics</i> ”, In Proc. of ACL’2005, pp. 223-230. (Acceptance Rate: 18%)
	A. C. Cem Say, Ozlem Cetinoglu, <b>Seniz Demir</b> , and Fatih Ogun. “ <i>A Natural Language Processing Infrastructure for Turkish</i> ”, In Proc. of COLING’2004, pp. 1385-1391.
NATIONAL CONFERENCE PUBLICATIONS	Ibrahim Maden, <b>Seniz Demir</b> , and Ender Ozcan. “ <i>Türkçe’den SQL Sorgularına Çeviri Yapan Bir Doğal Dil İşleme Uygulaması (Turkish Natural Language Interface for Generating SQL Queries)</i> ”, In Proc. of TBD 20. Ulusal Bilişim Kurultayı’2003.
	Ender Ozcan, Alpay Alkan, <b>Seniz Demir</b> , M. Ali Ergin, Hakan Kul, and S. Evren Seker. “ <i>Öğrenci Transkript ve Ders Kayıt Sistemi, Açık Kaynaklı Bir İnternet Uygulaması (STARS - Student Transcript, Administration and Registration System, an Open Source Internet Application)</i> ”, In Proc. of Akademik Bilişim’2003.
COURSES ASSISTED	At Yeditepe University: <ul style="list-style-type: none"> <li>• Database Management Systems (7 Semesters), Artificial Intelligence (3 Semesters)</li> <li>• Automata Theory and Formal Languages (3 Semesters), Theory of Algorithms (3 Semesters)</li> <li>• Data Structures (3 Semester), Compilers (1 Semester)</li> <li>• Software Engineering (1 Semester), File Structures and Databases (1 Semester)</li> </ul> At University of Delaware: <ul style="list-style-type: none"> <li>• Artificial Intelligence (3 Semesters), Database Systems (2 Semesters)</li> <li>• Theory of Algorithms (1 Semester), Logic and Programming (1 Semester)</li> <li>• Programming Development Techniques (1 Semester), General Computer Science (1 Semester)</li> </ul>
AWARDS	University of Delaware <ul style="list-style-type: none"> <li>• CIS Frank A. Pehrson Graduate Student Achievement Award, 2010</li> </ul> University of Delaware <ul style="list-style-type: none"> <li>• Dissertation Fellowship, 2009-2010</li> </ul> Marmara University <ul style="list-style-type: none"> <li>• Ranked 1st in graduation from the BSc program, 2000</li> </ul> Trabzon Anatolian High School <ul style="list-style-type: none"> <li>• Ranked 1st in graduation, 1996</li> </ul>
PROFESSIONAL ACTIVITIES	Organizer: Workshop on Language Resources and Technologies for Turkic Languages-LREC’2012 Co-Chair: Student Research Workshop, ACL’2010 Reviewer: SRW-NAACL’2012, ENLG’2011

ATTENDED  
CONFERENCES      ACL'2010, INLG'2010, Google Workshop for Women Engineers'2009 (Invited Talk), AS-  
SETS'2008, ACL-HLT'2008, INLG'2008, RANLP'2007, NAACL-HLT'2007, The Grace  
Hopper Celebration of Women in Computing'2006, ESSLLI'2006

LANGUAGES      Turkish (Native), English (Advanced)

REFERENCES      Sandra Carberry, Professor

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