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## Assoc. Prof. Dr. GÜLŞEN ERYİĞİT

Coordinator of ITU Natural Language Processing Research Group,  
Department Vice Chair, Faculty Executive Board Member

Istanbul Technical University  
Faculty of Computer & Informatics  
Artificial Intelligence & Data Engineering Department  
34469, Istanbul, Turkey



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<http://web.itu.edu.tr/~gulsenc/>

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### Research Areas

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Natural Language Processing (NLP)

- Machine learning and statistical methods for different NLP layers
- Semantic Analysis, question answering systems and chatbots
- Information Extraction
- NLP applications to Social Media Analytics

### Education

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- **PhD:** Istanbul Technical University, Computer Engineering Department (2007)
- **MSc:** Istanbul Technical University, Computer Engineering Department (2002)
- **BSc:** Marmara University, Computer Engineering Department (2000)  
graduated with the 2<sup>nd</sup> highest GPA, university entrance exam rank: 1253 over 1.265 million
- **High School:** Saint-Michel French High School (1995)  
highest score in university entrance exam in Math&Science

### Work Experience

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- ITU Artificial Intelligence and Data Engineering Department, Associate Professor, 2020-...
- Istanbul Technical University, Computer Engineering Department, Associate Professor, October 2018 - ...
- Istanbul Technical University, Computer Engineering Department, Assistant Professor, November 2007-2018
- Istanbul Technical University, Computer Engineering Department, Lecturer, January 2007- November 2007
- VXU (Växjö University) School of Mathematics and Systems Engineering, Visiting Researcher on Language Technology Group, January 2006 - June 2006
- Istanbul Technical University, Computer Engineering Department, Teaching & Research Assistant, October 2002-January 2007

- TAF-ITU MODSIM (Turkish Armed Forces - Istanbul Technical University Modeling & Simulation) Lab., Application Developer, April 2001 - August 2003
- Garanti Technology & Istanbul Technical University, Application Developer & Teaching and Research Assistant, December 2000 - May 2002

## **Administrative Duties**

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- ITU Faculty of Computer and Informatics Engineering, Executive Board Member (2020-...)
- ITU Artificial Intelligence and Data Engineering Department Vice Chair (2020-...)
- ITU Faculty of Computer and Informatics Engineering, Faculty Board Member (2019-...)
- ITU Computer Engineering Department Vice Chair (2019-2020)
- ITU - IBU (International Balkan University) Dual-Diploma Computer Engineering Program Coordinator (2019-...)
- Appointment and Promotion Commission of the Department - Member (2017-..)
- Natural Language Processing Group Coordinator (2016-..)
- Language Technologies and Social Robotic Lab. Coordinator (2016-..)
- Public Relations Committee of the Department - Member (2018-2019)
- Computer Engineering Graduate Program PhD Proficiency Board (2015-2018)
- Computer Engineering Dep. Research Lab-2 Coordinator (2015-2016)
- Faculty Board Member (2014-2017)
- Computer Engineering Graduate Program Admission Board (2013-2016)
- ITU-SUNY Binghamton Dual-Diploma Computer Engineering Program Coordinator (2011-2014)
- Public Relations Committee of the Department - Member (2008-2012)
- Social Organizations Commission of the Department - Member (2006 - 2008)
- Natural Language Processing Reading Group - Coordinator (June 2004 - September 2004)
- Representative of the Department's Research Assistants (December 2004 - January 2006)
- Assessment and Evaluation Commission of the Department - Member (Spring 2004)
- Program Improvement Commission of the Department - Member (Spring 2003)

## **Projects**

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### **funded by Research Funding Agencies**

- Information Extraction from Banking Documents using Visual Features, Tubitak 1505 University-Industry Cooperation Grant Program, Coordinator,
- Infrastructure Building and Preliminary Scientific Studies on the Development of AI Technologies for Turkey's Priority Areas, ITU - Scientific Research Projects, Researcher, 2019 -

- EnetCollect - European Network for Combining Language Learning with Crowdsourcing Techniques, European Cost Action CA16105, Management Committee Member, 2017-
- Coreference Resolution of Turkish, ITU - Scientific Research Projects, Coordinator, 2017-2018
- A Signing Avatar System for Turkish to Turkish Sign Language Machine Translation, TUBITAK 1003, Researcher, 2014-2016
- Parsing Web 2.0 Sentences, TUBITAK 1001, Coordinator, 2013-2015  
part of ICT COST (European Cooperation in Science and Technology) Action IC1207 - PARSEME
- PARSEME - Parsing and Multiword Expressions, European Cost Action IC1207, Management Committee Member, 2013-2017
- Turkish Mobile Personal Assistant, Turkey's Ministry of Science Industry and Technology SANTEZ, Coordinator, 2013-2014
- CLARIN - Common language resources and technology infrastructure, EU 7th Framework Programme, Partner, Turkey's representative, 2010-2011
- Dependency Analysis of Turkish, ITU - Scientific Research Projects, Researcher, 2005-2007
- HOGAY Graphical Interface and Data Filtering Scheme Project, ITU - TAF, Researcher, 2001-2003

#### **funded under University-Industry Relationships**

- Semantic Analysis Components for Legal Document Review Platforms, 2018-2020
- Dialogue System for Automotive Support Channels, ITU Technology Transfer Office - Automotive Sector, 2017
- Domain Adaptation of Turkish Sentiment Analysis Tool for New Sectors, ITU Technology Transfer Office - Telecommunication Sector, 2017
- Document Classification and Information Extraction System using Deep Learning Techniques- ITU Technology Transfer Office - Banking Sector, 2019-2020
- Entity Detection and Relation Extraction on Noisy Texts, ITU Technology Transfer Office - Banking Sector, 2016-2018
- Turkish Natural Language Processing Components for Semantic Web Technologies, ITU Technology Transfer Office - International Partnership, 2016-2017
- Morphological Generation for a movement-to-speech Turkish Sign Language Translation System, ITU Technology Transfer Office - IT Sector, 2016
- Improving Turkish Sentiment Analysis Results by the use of Advanced Feature Representations and Aspect-based Approaches, ITU Technology Transfer Office - Telecommunication Sector, 2015-2016
- Geocoding - Standardization of Addresses on a Geographic Information System, IT Sector, 2014-2015
- Social Customer Relationship Management, ITU Technology Transfer Office - Banking Sector, 2014-2015
- Social Media Monitoring, ITU Technology Transfer Office - Telecommunication Sector, 2014

#### **Honours & Awards**

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- TUBITAK Project Performance Award, 2018.

- ITU Plaque of Appreciation - Academic Achievement, December 2016.
- TUBITAK H2020 Project Proposal Above Threshold Award, November 2015.
- TUBITAK Travel Support for Participation to H2020 Consortiums, January 2015.
- ITU Plaque of Appreciation - Contribution to EU FP7 projects and Research Infrastructures, January 2012.
- Siemens Excellence Award, June 2007.
- Team member of the winning group in “CoNLL-XI Shared Task:Multi-lingual Dependency Parsing”, June 2007.
- Team member of the winning group in “CoNLL-X Shared Task:Multi-lingual Dependency Parsing”, June 2006.
- TUBITAK (Scientific Technical and Research Council of Turkey) Research Grant during studies in Sweden, January-June 2006.
- TUBITAK (Scientific Technical and Research Council of Turkey) PhD scholarship, 2004-2006.
- Garanti Technology postgraduate scholarship, 2000-2002.
- Marmara University Computer Engineering Department, second highest GPA, 2006.
- Marmara University Rectorship Scholar, October 1998-June 2000.

## Languages

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English (Advanced)    French (Advanced)  
 Turkish (Native)      German (Introductory)

## Offered Courses

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ITU Computer Engineering Department, Graduate Program

- Natural Language Processing (Msc)(Spring 2007, Fall 2007, Fall 2009-2019)
- Statistical Methods in Natural Language Processing (PHd)(Spring 2011, Spring 2013-2019)

ITU Computer Engineering Department, Undergraduate Program

- Data Structures (Fall 2007-2008, Spring 2009, Fall 2009, Spring 2010, Fall 2010-2019)
- Object Oriented Programming (Spring 2007-2019)
- Computer Operating Systems (Spring 2007)

SUNY Binghamton-ITU Information Systems Engineering, Undergraduate Program

- Programming I (Fall 2008-2011)
- Java Programming (Spring 2009-2011)

ITU Information Technologies, Graduate Program

- Data Structures and Algorithms(Spring 2007, Spring 2010-2011)
- Structured Programming (Fall 2009-2011)

## Personal Information

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Nationality : Turkish

Birth Date: 1978

Status: Married, Mother of 1 child (maternity leave in 2008)

Maden Name: Cebirođlu

## Research Groups

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- ITU NLP Natural Language Processing Group, Coordinator 2016-...
- ITU Learning from Data Research Group, Member 2006-...
- ITU NLP Natural Language Processing Group, Founding Member 2002-2016
- ITU EVAL Evolutionary Algorithms Research Group 2002-October 2005

## Invited Speaker & Panelist

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- 9 September 2020, TRAI Podcast Series, <https://open.spotify.com/episode/4uTtzwmhtHuZhGvt13zVGe?si=GLAr9f9TSd2Cpc5MqWZyLA>, Online.
- 14 August 2020, Wtech - Women in Technology, <https://youtu.be/MUV6WYMVpoY>, Online.
- 11 August 2020, Ufuk Tarhan asks, <https://youtu.be/E1-QV7Lj87w>, Online.
- 29 May 2020, Pitstop Webinars, <https://youtu.be/Ei3SeseAq0g>, Online.
- 26 December 2019, Istanbul National Education Directorate, AI Seminars, Istanbul.
- 8 September 2019, 3. Summer School for Data Science, Sabancı University, Istanbul.
- 21 September 2018, 3. International Conference on Computer Science and Engineering (UBMK'18), Sarajevo, Bosnia&Herzegovina.
- 05 July 2018, Summer School in AI at Bosphorus (Boğaz'da Yapay Öğrenme İsmail Arı Yaz Okulu), Boğaziçi University, Istanbul.
- 17 March 2017, Recent Innovations in Natural Language Processing, IEEE Computer Society Club, Istanbul Technical University, Istanbul.
- 31 January - 1 February 2017, Theoretical Foundations of Natural Language Processing, Corpus Linguistics Summer School, Hacettepe University Ankara.
- 27 January 2016, Research Infrastructures 2016-2017 Calls Info Day Success Story, ITU, Istanbul.
- 6 January 2016, Horizon 2020 Program Research Infrastructures Info Day and Experience Sharing Event Panelist, Tubitak, Ankara.
- 26 November 2015, "Turkish Natural Language Processing and ITU Turkish NLP Pipeline", Uppsala University, Sweden.
- 03 November 2015, "Natural Language Processing and Electronic Dictionaries", II. International Lexicography Symposium: Electronic Dictionaries, Istanbul, Turkey.

- 05 May 2015, “Parsing Web2.0 Language and Sentiment Analysis: The case of Turkish”, Emotion and Sentiment in Social and Expressive Media: opportunities and challenges for emotion-aware multi agent systems ESSEM@AAMAS 2015, Istanbul, Turkey.
- 07 November 2014, “ITU Turkish Natural Language Processing Studies: 2000-2014”, TurkLANG Conference, Istanbul, Turkey.
- 20 June 2013, “Parts-of-Speech Tagging and Dependency Parsing”, Summer School on Natural Language and Speech Technologies (SSNLST’2013), TÜBİTAK BİLGEM BTE, İstanbul.
- 23 February 2010, “Natural Language Processing & Morphological Analysis”, Koç University, Istanbul, Turkey.
- 24 April 2007, “Dependency Parsing of Turkish”, Boğaziçi Üniversitesi, Istanbul, Turkey.
- 4 May 2006, “Dependency Parsing of Turkish”, Uppsala Universitet, Uppsala, Sweden. (Minisymposium Computational aspects of building an annotated Swedish-Turkish parallel corpus)

## **Professional Activities**

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### **Memberships**

- Turkish Journal of Electrical Engineering & Computer Sciences, 2020-..., Editorial Board Member.
- ICT COST Action CA16105 “EnetCollect”, 2017-, Management Committee Member.
- Phraseology and Multiword Expressions (PMWE) book series, Language Science Press, 2016 -..., Editorial Board Member.
- ICT COST Action IC1207 “PARSEME”, 2013-2017, Management Committee Member.
- Marmara University, Computer Engineering Department, Advisory Board Member.
- ACL - Association for Computational Linguistics
- EU FP7 CLARIN Research Infrastructure, 2009-2011, National Representative.

### **Grant Proposal Reviews for Research Institutes**

- TUBITAK ARDEB , December 2019, Panel Evaluation External Expert.
- Ministry of Science, Industry and Technology, June 2019, R&D Center Evaluator.
- TUBITAK ARDEB, December 2017, Panel Evaluation Member.
- TUBITAK SOBAG, April 2017, Panel Evaluation External Expert.
- TUBITAK ARDEB , January 2016, Panel Evaluation External Expert.
- TUBITAK BİLTEG 1512 2. Aşama January 2016, Panel Evaluation Member.
- European Cooperation in Science and Technology “COST”, July 2014, Project Proposal Evaluator
- European Commission “Horizon 2020”, May-June 2014, Project Proposal Evaluator & Panel Evaluation Member
- TUBITAK ARDEB , June 2014, Panel Evaluation External Expert.
- TUBITAK ARDEB , May 2014-March 2016, Post-award reviewer.

- TUBITAK ARDEB , April 2014, Panel Evaluation External Expert.
- TUBITAK ARDEB (Research Grants Division), May 2013, Panel Evaluation Member.
- Ministry of Science, Industry and Technology, April 2012, Technology and Innovation Initiative Support Programs, Panel Evaluation Member.
- Swiss National Science Foundation, May 2011, Project Proposal Reviewer.
- TUBITAK (Turkish NSF) TEYDEB (Technology and Innovation Support Division), 2008–2017, Post-award reviewer.
- TUBITAK (Turkish NSF) TEYDEB (Technology and Innovation Support Division), 2008–2017, Project Proposal Reviewer.

### **Article Reviews for Journals**

- LREV(Language Resources and Evaluation Journal), 2020, Reviewer.
- Information Processing & Management, 2020 Reviewer.
- PeerJ Computer Science , 2020 Reviewer.
- International Journal of Informatics Technologies, 2019, Reviewer.
- Information Processing & Management, 2019 Reviewer.
- Computer Speech & Language, 2017, 2019 Reviewer.
- Turkish Journal of Electrical Engineering & Computer Sciences, 2017-2020 Reviewer.
- Süleyman Demirel University Journal of Natural and Applied Sciences, 2017, Reviewer.
- International Journal of Intelligent Systems and Applications in Engineering, 2017, 2019 Reviewer.
- Journal of Polytechnic of Gazi University, 2016, Reviewer.
- Journal of the Faculty of Engineering and Architecture of Gazi University, 2016, Reviewer.
- Language Resources and Evaluation, 2016, Reviewer.
- Turkish Journal of Electrical Engineering & Computer Sciences, 2014, Reviewer.
- LREV(Language Resources and Evaluation Journal), 2013, Reviewer.
- IEEE Transactions on Audio, Speech and Language Processing, 2013, Reviewer.
- Computer Journal, 2012 Reviewer.
- IEEE Transactions on Audio, Speech and Language Processing, 2012, Reviewer.
- Turkish Journal of Electrical Engineering & Computer Sciences, 2012, Reviewer.
- Research on Language and Computation, Springer, 2010, Reviewer.
- Computer Journal, 2008, Reviewer.

### **Shared Task Organizations**

- PARSEME shared task on automatic identification of verbal MWEs, EACL 2017, Language Leader for Turkish.
- SemEval-2016 task 5: Aspect based sentiment analysis, Language Leader for Turkish.

- CoNLL-XI SharedTask: Multi-lingual Dependency Parsing, 2007, Data Provider for Turkish test dataset.

### **Conference Committee Memberships and Reviews**

- KDF 2021 : The AAAI-21 Workshop on Knowledge Discovery from Unstructured Data in Financial Services, Program Committee Member.
- ACL 2020, Seattle US, Reviewer.
- Coling 2020, Barcelona, Spain, Review Committee Member.
- MWE workshop at COLING 2020, Barcelona, Program Committee Member.
- MWE workshop at ACL 2019, Florence, Program Committee Member.
- UBMK (International Conference on Computer Science and Engineering), Sarajevo-Bosnia, 2018, Program Committee Member, Organizing Committee Member.
- Coling 2018 International Conference on Computational Linguistics, New Mexico, USA, Program Committee Member.
- EMNLP 2017 Conference on Empirical Methods in Natural Language Processing, Copenhagen, Program Committee Member.
- MWE 2017 The 13th Workshop on Multiword Expressions, Valencia, Program Committee Member.
- UBMK (International Conference on Computer Science and Engineering), Antalya, 2017, Program Committee Member, Organizing Committee Member.
- PARSEME 7 (7th General PARSEME Meeting), Dubrovnik, 2016, Program Committee Member.
- TURCLING 2016, 2016, Program Committee Member.
- CICLING 2016, 2016, Program Committee Member.
- SEMEVAL 2016, International Workshop on Semantic Evaluation, 2016, Reviewer.
- PARSEME 6 (6th General PARSEME Meeting), Struga, Macedonia, 2016, Program Committee Member.
- PARSEME 5 (5th General PARSEME Meeting), Iasi, Romain, 2015, Program Committee Member.
- SPMRL 2015 in conjunction with IWPT 2015 in Bilbao (Basque Country, Spain), 2015, Program Committee Member.
- DEPLING International Conference on Dependency Linguistics, Uppsala, Sweden, 2015, Program Committee Member.
- Coling Workshop SPMRL-SANCL First Joint Workshop on Statistical Parsing of Morphologically Rich Languages and Syntactic Analysis of Non-Canonical Languages, 2014, Program Committee Member.
- EACL Workshop on 10th Workshop on Multiword Expressions (MWE), 2014, Program Committee Member.
- Conference on Empirical Methods in Natural Language Processing (EMNLP), 2013, Reviewer.
- EMNLP-Workshop on Statistical Parsing of Morphologically Rich Languages (SPMRL), 2013, Program Committee Member.
- The 6th International Joint Conference on Natural Language Processing (IJCNLP), 2013, Reviewer.
- 28th International Symposium on Computer and Information Sciences (ISCIS), 2013, Reviewer.



- ACL 2013, Program Committee Member.
- SPMRL 2013, 4th Workshop on Statistical Parsing of Morphologically Rich Languages, Program Committee Member.
- ESSLLI 2013 EPI Workshop on extrinsic parse improvement, Program Committee Member.
- SP-Sem-MRL 2012 - ACL 2012 Joint Workshop on Statistical Parsing and Semantic Processing of Morphologically-Rich Languages, Program Committee Member.
- SANCL 2012 - NAACL-HLT Workshop on Syntactic Analysis of Non-Canonical Language, Program Committee Member.
- LREC 2012 - First Workshop on Language Resources and Technologies for Turkic Languages, Program Committee Member.
- The eight international conference on Language Resources and Evaluation (LREC), 2012, Organizing Committee Member.
- International Conference on Dependency Linguistics, September 2011 Barcelona, Program Committee Member.
- EVOStar 2010, Organizing Committee Member.
- ACL 2010, Program Committee Member.
- ACL 2008 Student Research Workshop, 2008, Program Committee Member.
- 11th Conference on Computational Natural Language Learning, 2007, Reviewer.
- 3rd Asia Pacific International Symposium on Information Technology, 2004, Organizing Committee Member.
- International Conference on Artificial Intelligence and Applications, 2004, Reviewer.

## Attended Conferences and Seminars

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(fa.: funding agency)

- 6-8 July 2020, The 58th Annual Meeting of the Association for Computational Linguistics. (fa. ACL)
- 3-7 February 2020, AB COST Action CA16105 CrowdFest, Portekiz. (fa. Eu Cost)
- 27-29 November 2019, AB COST Action CA16105 LARA Workshop, Slovakia. (fa. Eu Cost)
- 14-15 November 2019, AB COST Action CA16105 Working Group Meetings, Malta. (fa. Eu Cost)
- 13-15 March 2019, EU Cost Action CA16105 MC and Working Group Meetings, Portugal. (fa. Eu Cost)
- 14-16 March 2018, EU Cost Action CA16105 MC and Working Group Meetings, Romania. (fa. Eu Cost)
- 9-10 November 2017, EU ICT Proposers' Day 2017, Budapest, Hungary. (fa. ITÜ)
- 7-8 April 2016, EU Cost Action IC1207 Meeting: MC and Working Group Meetings, Macedonia. (fa. Eu Cost)
- 19-20 March 2015, EU Cost Action IC1207 Meeting: MC and Working Group Meetings, Malta. (fa. Eu Cost)
- 16 January 2015, ICT 16 Big Data Networking Day, Brussel. (fa. TUBITAK)
- 10-11 March 2014, EU Cost Action IC1207 Meeting: MC and Working Group Meetings, Athens. (fa. Eu Cost)
- 28-30 October 2013, Tenth Symposium on Natural Language Processing (SNLP-2013), Phuket. (fa. ITU)
- 15-18 September 2013, Action IC1207 Meeting: MC and Working Group Meetings, Warsaw. (fa. Eu Cost)

- 4-9 August 2013, ACL - Annual Meeting of the Association for Computational Linguistics, Sofia. (*fa. Turkcell*)
- 8 March 2013, Action IC1207 Meeting: PARSEME Action's kick-off meeting, Brussels. (*fa. ITU*)
- 15-18 September 2013, Action IC1207 Meeting: MC and Working Group Meetings, Warsaw. (*fa. Eu Cost*)
- 23-25 May 2012, LREC - The Eight Int. Conf. on Language Resources and Evaluation, Istanbul. (*fa. ITU*)
- 4-8 October 2011, IWPT - 12th International Conference on Parsing Technologies, Dublin. (*fa. ITU*)
- 18 October 2010, CLARIN Consortium Meeting, Vienna.
- 7-9 April 2010, EvoStar The main European events on Evolutionary Computation, Istanbul.
- 15 February 2010, Graduate Adviser Workshop, ITU FBE, Istanbul, Turkey (*fa. ITU*)
- 7-8 December 2009, EU FP7 Contract Negotiation and Project Management Workshop, Istanbul (*fa. ITU*)
- 26-27 October 2009, EU FP7 Proposal Writing Workshop, Istanbul (*fa. ITU*)
- 29 September-2 October 2009, NEERI09, Networking Event for European Research Infrastructures, Helsinki, Finland (*fa. TUBITAK National Contact Point Special Grant & ITU*)
- 23-30 June 2007, 45th Annual Meeting of the Association for Computational Linguistics, Prague (*fa. ITU*)
- 17-19 December 2006, 21st International Conference on the Computer Processing of Oriental Languages, Sentosa, Singapore. (*fa. TUBITAK*)
- 4-9 June 2006, HLT-NAACL 2006, Human Language Technology Conference - North American chapter of the Association for Computational Linguistics annual meeting, New York, USA. (*fa. VXU*)
- 4-5 May 2006, Computational Aspects of Building an Annotated Swedish-Turkish Parallel Corpus, Uppsala, Sweden. (*fa. Uppsala Univ.*)
- 4-7 April 2006, 11th Conference of the European Chapter of ACL, Trento. (*fa. ITU*)
- 30 March-1 April 2005, EuroGP2005 & EvoCOP2005, Lausanne, Switzerland. (*fa. TUBITAK*)
- 24-28 October 2004, 19th Annual ACM Conference on Object-Oriented Programming, Systems, Languages, and Applications, Vancouver, British Columbia, Canada.
- 26-28 May 2004, Microsoft Research Academic Days in Istanbul.
- 16-18 January 2004, IASTED Int. Conf. on Artificial Intelligence and Applications, Innsbruck. (*fa. ITU*)
- 2-4 July 2003, 12th International Turkish Symposium on Artificial Intelligence and Neural Networks, Çanakkale.
- 4 - 6 January 2002, .NET Academic Workshop, Microsoft Turkey.
- 3 - 6 September 2002, TBD 19. Information Congress, Istanbul.
- 10-11 October 2001, Joint Theater Level Simulation Users Conference by Rolands & Associates Corporation, Hyatt Regency, Monterey, California. (*fa. TAF*)
- 30 October -3 November 2000, Windows 2000 Professional and Server, KoçSystem Education Center, Istanbul.

## Media Appearances

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- Istanbul National Education Directorate Magazine, November 2020.

- Istanbul National Education Directorate Press Release, <https://istanbulakademi.meb.gov.tr/haberler.php?pID=93> , December 2019.
- Ministry of Education Press Release, <istanbul.meb.gov.tr/www/yapay-zek-seminerleri/icerik/2934> , December 2019.
- ITU Foundation Magazine, issue 76, page 48, ITU's Technology Transfer Interface ITU TTO, [https://www.ituvakif.org.tr/dergi/sayi\\_76.pdf](https://www.ituvakif.org.tr/dergi/sayi_76.pdf), April 2017.
- ITU Foundation Magazine, issue 75, page 41, ITU Natural Language Processing Pipeline, [https://www.ituvakif.org.tr/dergi.asp#prettyPhoto\[1\]/0/](https://www.ituvakif.org.tr/dergi.asp#prettyPhoto[1]/0/), February 2017.
- ITU News, First International License by ITU Technology Transfer Office, <http://www.itu.edu.tr/akademi/itu-navo-tto/itunova-tto-dan-abd-ye-ilk-lisanslama-itu-dogal-dil-isleme-yazilim-zinciri>, December 2016.
- ITU Technology Transfer Office, Academic Interviews, ITU Turkish Natural Language Processing Pipeline, <https://www.youtube.com/watch?v=IyU5Z03uuog>, December 2016.
- Turkcell Academy ITU Computer Engineering, Natural Language Processing Studies at ITU, <https://vimeo.com/87570449>, [https://www.youtube.com/watch?v=EITYo\\_20V2M](https://www.youtube.com/watch?v=EITYo_20V2M), September 2013.
- H2O magazine, A Project Teaching Turkish to Electronic Devices, <http://www.itunovatto.com.tr/Bulten/2/PDF.pdf> page 30, 2014.
- VOX Vaxjo Universitet Magazin Visiting Researcher Interview, <https://web.itu.edu.tr/gulsenc/interview.pdf>, March 2006.

## **Publications**

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4062 citations in Google Scholar by November 2020, h-index=23

### **Thesis**

*Dependency parsing of Turkish*, 2006. Ph.D. thesis, Istanbul Technical University, Istanbul.

*An affix stripping morphological analyzer for Turkish*, 2002. Master Thesis, Istanbul Technical University, Istanbul.

### **International Journal Articles**

Berke Oral, Erdem Emekligil, Secil Arslan and **Gülşen Eryiğit**. 2020. Information extraction from text intensive and visually rich banking documents. *Information Processing & Management*, 57(6):102361. (indexed in SCI-Expanded)

**Gülşen Eryiğit**, Cihat Eryiğit, Serpil Karabüklü, Meltem Kelepir, Aslı Özkul, Tuğba Pamay, Dilara Torunoğlu-Selamet, and Hatice Köse. 2020. Building the first comprehensive machine-readable Turkish sign language resource: methods, challenges and solutions. *Language Resources and Evaluation*,54(1): 97–121. (indexed in SCI-Expanded)

Umut Sulubacak and **Gülşen Eryiğit**. 2018. Implementing universal dependency, morphology and multiword expression annotation standards for Turkish language processing. *Turkish Journal of Electrical Engineering & Computer Sciences*, 26(3):1662-1672. (indexed in SCI-Expanded and TR-Index)

- Gözde Gül İğgüder Şahin, Erdem Emekligil, Seçil Arslan, Onur Ağin and **Gülşen Eryiğit**. 2018. Relation extraction via one-shot dependency parsing on inter-sentential, higher-order and nested relations. *Turkish Journal of Electrical Engineering & Computer Sciences*, 26(2):830–843. (indexed in SCI-Expanded and TR-Index)
- Mathieu Constant, **Gülşen Eryiğit**, Johanna Monti, Lonneke van der Plas, Carlos Ramisch, Michael Rosner and Amalia Todirascu. 2017. Multiword Expression Processing: A Survey. *Computational Linguistics*, 43(4): 837–892. (indexed in SCI and SSCI)
- Gökhan Çelikkaya and **Gülşen Eryiğit**. 2017. Use of NLP Techniques for an Enhanced Mobile Personal Assistant: The Case of Turkish. *International Journal of Intelligent Systems and Applications in Engineering*, 5(3):94–104. (indexed in TR-Index)
- Gülşen Eryiğit** and Dilara Torunoğlu-Selamet. 2017. Social media text normalization for Turkish. *Natural Language Engineering Journal*, 23(6): 835–875. (indexed in SCI-Expanded and SSCI)
- Gökhan Akın Şeker and **Gülşen Eryiğit**. 2017. Extending a CRF-based named entity recognition model for Turkish well formed text and user generated content. *Semantic Web Journal*, 8(5):625–642. (indexed in SCI-Expanded)
- Cihat Eryiğit, Hatice Köse, Meltem Kelepir and **Gülşen Eryiğit**. 2016. Building machine-readable knowledge representations for Turkish sign language generation. *Knowledge-Based Systems*, 108:179–194. (indexed in SCI)
- Gülşen Eryiğit**, Joakim Nivre and Kemal Oflazer. 2008. Dependency parsing of Turkish. *Computational Linguistics*, doi: 10.1162/coli.2008.07-017-R1-06-83, 34(3):357–389. (indexed in SCI and SSCI)
- Joakim Nivre, Johan Hall, Jens Nilsson, Atanas Chanev, **Gülşen Eryiğit**, Sandra Kübler, Stetoslav Marinov and Erwin Marsi. 2007. Maltparser: A language-independent system for data-driven dependency parsing. *Natural Language Engineering Journal*, 13(2):95–135. (indexed in Scopus at the time of publication, the journal is currently indexed in SCI-Expanded)
- Cüneyd Tantuğ and **Gülşen Eryiğit**, 2006. Performance Analysis of Naïve Bayes Classification, Support Vector Machines and Neural Networks for Spam Categorization, *Applied Soft Computing Technologies: The Challenge of Complexity* (34), pages 495–504. Springer Advances in Soft Computing.
- Şima Uyar, Sanem Sariel and **Gülşen Eryiğit**. 2004. A gene based adaptive mutation strategy for genetic algorithms. Genetic and Evolutionary Computation GECCO 2004, Springer LNCS 3103, pages 227–281. (indexed in SCI-Expanded)

### **National Journal Articles**

- Fatih Samet Çetin and **Gülşen Eryiğit**. 2018. Türkçe Hedef Tabanlı Duygu Analizi için Alt Görevlerin İncelenmesi: Hedef Terim, Hedef Kategori ve Duygu Sınıfı Belirleme (Investigation of Aspect Based Turkish Sentiment Analysis Subtasks- Identification of Aspect Term, Aspect Category and Sentiment Polarity). *Bilişim Teknolojileri Dergisi (kabul tarihi: Aralık 2017), Gazi üniversitesi*,11(1):43–56. (indexed in TR-Index)
- Gökhan Çelikkaya and **Gülşen Eryiğit**. 2014. A mobile assistant for Turkish. *Türkiye Bilişim Vakfı Bilgisayar Bilimleri ve Mühendisliği Dergisi, Turkish Informatics Foundation Computer Science and Engineering Journal (Special Issue on NLP)*, 8(8).

Ezgi Yıldırım, Fatih Samet Çetin, **Gülşen Eryiğit** and Tanel Temel. 2014. The impact of NLP on Turkish sentiment analysis. *Türkiye Bilişim Vakfı Bilgisayar Bilimleri ve Mühendisliği Dergisi, Turkish Informatics Foundation Computer Science and Engineering Journal (Special Issue on NLP)*, 8(8).

**Gülşen Eryiğit** and Tuğba PAMAY. 2014. ITU validation set. *Türkiye Bilişim Vakfı Bilgisayar Bilimleri ve Mühendisliği Dergisi, Turkish Informatics Foundation Computer Science and Engineering Journal (Special Issue on NLP)*, 8(8).

**Gülşen Eryiğit**. 2013. Biçimbilimsel Çözümleme. *Türkiye Bilişim Vakfı Bilgisayar Bilimleri ve Mühendisliği Dergisi*, 6:33–55.

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