# Hüseyin Hüsnü Cem Bozşahin

夏胤

# CURRICULUM VITAE

CURRENT POST Professor of Cognitive Science, at the Informatics Institute, Middle East Technical University (METU aka. ODTÜ), 06800 Ankara, Turkey

DEGREES				
1990 PhD	Computer Science, Arizona State University, Tempe, Arizona. (thesis: <i>Memory Based Approach to Learning Commonsense Causal Relations from Text.</i> supervisor: Prof. Nicholas V. Findler; now deceased).			
1984 MSc	Industrial Engineering, Middle East Technical University, Ankara. (thesis: <i>Enhancing the Performance of Query Processing in a Distributed Database System.</i> supervisor: Prof. Abdullah U. Tansel; now at Baruch College).			
1982 BSc	Industrial Engineering, Middle East Technical University, Ankara.			
PRIMARY POSTS				
2011 -	Prof.dr., Cognitive Science, METU.			
2000 - 2011	Assoc. Prof.dr., Computer Engineering, METU and Cognitive Science, METU.			
1992 - 2000	Asst. Prof.dr., Computer Engineering, METU.			
1990 - 1992	Assistant professor, Computer Science, Ohio University.			
VISITING and COLLABORATIVE POSTS				
2015 – 2016	Visiting Research Fellow. Center for Linguistics, CLUL, University of Lisbon.			
2010–2015	Researcher. GRAMPLUS FP7 Project (Ideas). School of Informatics, University of Edinburgh.			
2011	Visiting Scientist. Boğaziçi University, Cognitive Science. İstanbul.			
2000 - 2010	Affiliated faculty, Cognitive Science, Informatics Institute, METU.			
7/07 - 8/07	Visiting Research Fellow, Department of Linguistics. University of Edinburgh.			
7/06 - 8/06	Visiting Research Fellow, Institute for Language, Cognition and Computation (ILLC, formerly ICCS), School of Informatics, University of Edinburgh.			
6/05 - 9/05	Visiting Research Fellow, ILLC, University of Edinburgh.			
9/02 - 12/03	Visiting Research Fellow, ILLC, University of Edinburgh.			
1988 – 1990	Research Associate, AI Laboratory (Prof. Nicholas V. Findler, director), Computer Science Department, Arizona State University.			
1985 - 1988	Research Associate, Information Systems (John O'Connell, director), Arizona State University.			
1982 - 1984	Research Assistant, Industrial Engineering, METU.			

**RESEARCH** I work at the intersection of linguistics, computer science, philosophy and cognitive science, more or less in this order of involvement. In general, I work on exploring unexpectedly common structure of apparently singular, unique and distinct phenomena, e.g. language, change and action. In particular, I study i) morphology-syntax-semantics connection in language, ii) understanding typological diversity of the trio in various languages, iii) understanding the processes of language acquisition by exploratory models, iv) exploring simple structures which may underlie complex daily action, and on v) how to avoid frequent misunderstanding of the computer in society.

#### TEACHING INTERESTS

Linguistics, computer science, philosophy of computer science, philosophy of cognitive science  ${f RESEARCH\ EXPERIENCE}$ 

L: Linguistics CS: Computer science P: Philosophy C: Cognitive science CL: Computational linguistics

- \* Book ∘ Article ⋄ Chapter ▷ Proceedings
- oL 2023 C. Bozşahin. Combinatory Categorial Grammar and Turkish. In *Encyclopedia of Turkic Languages and Linguistics*, Lars Johanson, ed. Brill. DOI 10.1163/2667-3029\_ETLO\_SIM\_032593.
- oL 2022 C. Bozşahin. Referentiality and configurationality in the idiom and the phrasal verb. J. Logic, Language and Information, 27:1–33.
- ∘CL 2022 B. Can, H. Aleçakır, S. Manandhar, C. Bozşahin. Joint learning of morphology and syntax with cross-level information flow. *J. Natural Language Engineering.* **20**:1-33.
- ▶L 2021 C. Bozşahin. Idiosyncrasy and derivational morphology: From distribution to annotation. Dagstuhl Report.
- ⊳L 2019 C. Bozşahin, Tzu-Ching Kao. The Chinese Double Nominative. Categorial Grammar Summit, Changsha, China. (Yunbao Shi, ed.)
- oP 2018 C. Bozşahin. Computers aren't syntax all the way down, or content all the way up. *Minds and Machines*: **28** (3):543–567.
- ▶L 2018 C. Bozşahin, Arzu Burcu Güven. Paracompositionality, MWEs, and argument substitution. ed. A. Foret, G. Kobele, S. Pogodalla, LNCS 10950, Springer, pp. 16–36.
- ◇L 2018 C. Bozşahin. Command and order by type substitution: Another way to look at word order. Word Order in Turkish. S. Özsoy ed., Springer.
- ◇CL 2018 I. Demirşahin, D. Zeyrek, C. Bozşahin. Turkish Discourse Bank: Motivations, investigations on discourse structure, and the prospects. In *Turkish Natural Language Processing*, K. Oflazer and M. Saraçlar (eds.), Springer.
- ◇CL 2018 R. Cakıcı, M. Steedman, C. Bozşahin. Wide-coverage parsing, semantics and morphology. In *Turkish Natural Language Processing*, K. Oflazer and M. Saraçlar (eds). Springer.
- ◇L 2017 C. Bozşahin. Köktendilbilgisi [radical lexicalism]. In 45. Yıl Yazıları, Hacettepe Univ. Press, N. Büyükkantarcıoğlu, I. Özyıldırım, E. Yarar, eds.
- **◇CS** 2016 Bozşahin, C. Natural Recursion doesn't work that way. in *Fundamental Issues of Artifical Intelligence*, V. Mueller (ed.), Springer.
- ⋄P 2016 C. Bozşahin. What is a Computational Constraint? In Computing and Philosophy, V. Mueller (ed), Springer.
- ▶CL 2016 Can, B., Kumyol, S and C Bozşahin. Allomorphs and Binary Transitions Reduce Sparsity in Turkish Semi-supervised Morphological Processing. in CICLing 2016.
- o**L** 2014 C. Bozşahin. Word order as projection. *Dilbilim Araştırmaları* [Journal of Linguistic Research]. Sumru Özsoy festschrift special issue. **2014**/1–23.
- ⊳C 2014 Uyumaz, Begum, C. Bozşahin and Deniz Zeyrek. Turkish resources for visual word recognition. LREC 2014, Rejkjavik.
- ⊳P 2014 C. Bozşahin. What's a computational constraint? In Annual meeting of Int Asn for Computing and Philosophy (IACAP), Thessaloniki, July 2014.
- ⊳CS 2014 Enes Yüncü, Hüseyin Hacihabiboğlu and C. Bozşahin. Automatic Speech Emotion Recognition using Auditory Models with Binary Decision Tree and SVM. In 22nd Int Conf on Pattern Recognition (ICPR), Stockholm.
- $\triangleright$ **P** 2013 C. Bozşahin. Natural recursion doesn't work that way. in Int. Conf. on Philosophy and Theory of AI, Oxford University, September.
- ▶C 2013 Kılıç, Özkan and C. Bozşahin. Selection of Linker Type in Emphatic Reduplication: Speaker's Intuition meets Corpus Statistics. In 35th Annual Meeting of the Cognitive Science Society, Berlin, Germany, August.
- ▶CL 2013 Demirşahin, Işın, Öztürel, Adnan, C. Bozşahin and Deniz Zeyrek. Applicative Structures and Immediate Discourse in the Turkish Discourse Bank. In Proc. of the Seventh Language Annotation Workshop (LAW), ACL Meeting, Sofia, August.

- $\diamond \mathbf{L}\,2013$  C. Bozşahin. Properties as Anaphors. MITWPL 67. ed: U. Özge.
- ▷C 2012 Öztürel, I. Adnan and C. Bozşahin. Musical Agreement via Social Dynamics Can Self-Organize a Closed Community of Music: A Computational Model. In 12th International Conference on Music Perception and Cognition (ICMPC) and 8th Triennial Conference of the European Society for the Cognitive Sciences of Music (ESCOM). Thessaloniki, Greece, July.
- ▶C 2012 Eryılmaz, Kerem and C. Bozşahin. Lexical Redundancy, Naming Game and Selfconstrained Synonymy. In 34th Annual Meeting of the Cognitive Science Society, Sapporo, Japan, August.
- ▶CL 2012 Kılıç, Özkan and C. Bozşahin. Semi-supervised morpheme segmentation without morphological analysis. In LREC 2012, Istanbul, May.
- ▶CL 2010 Berfin Aktaş, C. Bozşahin and Deniz Zeyrek. Discourse relation configurations in Turkish and an annotation tool. Proc. of the 4th Language Annotation Workshop (LAW IV), ACL Meeting, Uppsala Sweden, August 2010.
- \*L 2012 C. Bozşahin. Combinatory Linguistics. Berlin: de Grouyter Mouton.
- o**L** 2012 U. Turan, D. Zeyrek, C. Bozşahin. Söylem ve tutarlılık bağlari [Coherence relations in discourse] *Dilbilim Araştırmaları* [Journal of Linguistic Research] **23**(2).
- oL 2011 C. Bozşahin. Serialization and the Verb in Turkish Coordinate Reduction. *Dilbilim Araştırmaları* [Journal of Linguistic Research] **22**(1):51–67.
- oL 2010 U. Özge, C. Bozşahin. Intonation in the grammar of Turkish. Lingua, 120:132–175.
- ⊳L 2010 C. Bozşahin, D. Zeyrek, I. Demirşahin. Söylem ve Yapı [Structure and Discourse]. 24th Annual Meeting of Linguistics, Ankara, May 2010.
- ▷CL 2009 Deniz Zeyrek, Ümit Deniz Turan, C. Bozşahin, Ruket Çakıcı, Ayışığı B. Sevdik-Çallı, Işın Demirşahin, Berfin Aktaş, İhsan Yalçınkaya and Hale Ögel. Proc. of the Third Language Annotation Workshop (LAW III), ACL Meeting, Singapore, August 2009. Annotating Subordinators in the Turkish Discourse Bank.
- ▶L 2008 D. Zeyrek, U. D. Turan, C. Bozşahin. The role of annotation in understanding discourse. Proc. of the 14th Int. Conf. on Turkish Linguistics. August 2008, Antalya.
- ⊳C 2007 Ç. Çöltekin and C. Bozşahin. Syllables, Morphemes and Bayesian Computational Models of Acquiring a Word Grammar. Proc. of the 29th Annual Meeting of Cognitive Science Society. Nashville, TN.
- ▶ P 2006 C. Bozşahin. Grammars, Programs and the Chinese Room. Int. European Conference on Computing and Philosophy, ECAP, Trondheim.
- ⊳L 2006 C. Bozşahin. *Kadıköy Iskelesi* and a tale of two compounds. Proc. of 13th Int. Conf. on Turkish Linguistics, Uppsala.
- ⊳L 2006 Sevinç, A.M., C. Bozşahin. Verbal Categories in Turkish Sign Language (TID). Proc. of 13th Int. Conf. on Turkish Linguistics, Uppsala.
- ⊳L 2004 C. Bozşahin. On the Turkish Controllee. Proc. of 12th International Conference on Turkish Linguistics, August, Izmir.
- ▶L 2003 C. Bozşahin and M. Steedman. Control, Grammatical Relations, and Argument Structure: Towards a Parameterized Theory of the Lexicon for CCG. *The Fifth Syntax and Semantics Conference in Paris* (CSSP'03).
- ▶CS 2003 Tutar, S., C. Bozşahin, and H. Oğuztüzün. TPD: An Educational Programming Language Based on Turkish Syntax. *The First Balkan Conference in Informatics*. November, Thessaloniki.
- ◦CL 2002 C. Bozşahin. The Combinatory Morphemic Lexicon. Computational Linguistics, 28(2):145– 186.
- ∘CL 2002 Ö. Yüksel, C. Bozşahin. Contextually Appropriate Reference Generation. *Natural Language Engineering* 8(1):69–89.
- o**L** 2000 C. Bozşahin, D. Zeyrek. Dilbilgisi, Bilişim, ve Bilişsel Bilim [Grammar, Computation, and Cognitive Science].
- ⊳L 2000 C. Bozşahin. Gapping and Word Order in Turkish. Proc. of 10th International Conference on Turkish Linguistics, August, Istanbul.
  Dilbilim Araştırmaları [Journal of Linguistic Research] 11.

⋄CL 1999 O. Şehitoğlu, C. Bozşahin. Lexical Rules and Lexical Organization. *Breadth and Depth of Semantic Lexicons*, E. Viegas (ed.), Boston: Kluwer.

- ⊳CS 1999 H. Oğuztüzün, C. Bozşahin. Kuram, Tasarım, ve Gerçekleştirim Bağlamında Dil Işlemcileri Dersi [Compiler Design Courses from the Perspective of Theory, Design, and Development], Elektrik-Elektronik Bilgisayar Müh. 8. Ulusal Kurultayı. Gaziantep.
- ▶CL 1998 C. Bozşahin. Deriving the Predicate-Argument Structure for a Free Word Order Language. Proc. Joint Conference for Computational Linguistics (COLING) and Association for Computational Linguistics (ACL), August, Montreal.
- ▶CL 1998 İ. Pembeci, C. Bozşahin, D. Zeyrek. Computer-aided Learning of Turkish Morphology.

  Proceedings of Joint Conf. of Assoc. for Computing in Humanities (ACH) and Assoc.

  for Literary & Linguistic Computing (ALLC), July, Debrecen, Hungary.
- oCL 1997 C. Bozşahin. Combinatory Logic and Natural Language Parsing. *Elektrik: Turkish Journal of Electrical Engineering and Computer Sciences*, **3**(1):1–12.
- ▶CS 1997 İ. Altıntaş, C. Bozşahin. Reducing the Order Bias in Incremental Learning. Proceedings of the 6th Turkish Symposium on AI and Neural Networks (TAINN), May, Ankara.
- ⊳L 1997 C. Bozşahin. Türkçe'deki Durum İmlemesinin Ulamsal bir İrdelemesi [A Categorial Treatment of Case Marking in Turkish]. XI. Dilbilim Kurultayı [XIth Annual Meeting on Linguistics], May, Ankara.
- o**L** 1996 C. Bozşahin. Ülamsal Dilbilgisi ve Türkçe [Categorial Grammar and Turkish]. *Dilbilim Araştırmaları* [Journal of Linguistic Research] **7**:230–244.
- ⊳CL 1996 O. Şehitoğlu, C. Bozşahin. Morphological Productivity in the Lexicon. *Proc. of the ACL SIGLEX Workshop*, July, Santa Cruz, USA.
- ▶CL 1995 C. Bozşahin, Elvan Göçmen. A Categorial Framework for Composition in Multiple Linguistic Domains. Proceedings of the 4th International Conference on Cognitive Science of Natural Language Processing. July, Dublin.
- ⊳CL 1994 K. Oflazer, C. Bozşahin. Türkçe Doğal Dil İşleme [Turkish NLP]. Bilişim 94 [Informatics Congress]. September, Istanbul.
- ▶CL 1994 K. Oflazer, C. Bozşahin. Turkish Natural Language Processing Initiative: An overview.

  Proceedings of the 3rd Turkish Symposium on Artificial Intelligence ve Neural Networks (TAINN), June, Ankara.
- ▶CL 1993 C.Bozşahin. Parsing Constituents with Categorial Grammars. Proceedings of the 8th International Symposium on Computer and Information Sciences (ISCIS), September, Istanbul.
- ∘C 1992 C. Bozşahin, N.V. Findler. Memory-based Hypothesis Formation: Heuristic Learning of Commonsense Causal Relations from Text. *Cognitive Science*, **16**(4):431–454.
- ▶CS 1990 E.A. Özkarahan, C. Bozşahin. Query processing and file management issues in partitioned databases. Proceedings of 1990 ACM Annual Conference, Washington D.C.
- ⊳C 1990 C. Bozşahin, N.V. Findler. Representing Causal Knowledge. *Proceedings of the 5th Rocky Mountain Conference on Artificial Intelligence (RMCAI)*, June, Las Cruces, New Mexico.
- ▶CS 1990 U.K. Sengupta, C. Bozşahin v.d.. PGMULES: An Approach to Supplementing Simulation Models with Knowledge-based Planning Systems. Proceedings of the Workshop on Artificial Intelligence and Simulation, 8th National Conference on Artificial Intelligence (AAAI), August, Boston.
- ∘CS 1988 E.A. Özkarahan, C. Bozşahin. Join Strategies Using Data Space Partitioning. New Generation Computing, 6(1):19–39.

### SPONSORED RESEARCH

- 2017–2018 Principle Investigator. Machine learning of deriving surface expressions from logical form. METU.
- 2015-2016 Principle Investigator. Linguistic and Computational Investigation of Portuguese Clitics and Affixes. TÜBİTAK Grant no. 1059B191500737, September-May.
- 2010-2015 Researcher. Grammar-based robust natural language processing. European Research Council, FP7 Grant GRAMPLUS, to Prof. Mark Steedman (PI), Univ. Edinburgh.

2008–2011 Researcher. Turkish Discourse Annotation (MEDID Project). TÜBİTAK 107E056. Deniz Zeyrek (PI).

- 2007 Chief scientific consultant. AGMLab, Cyberpark, Ankara. Search engine bilgi.com for Turkish.
- 7/07 8/07 Research Fellow. The School of Philosophy, Psychology and Language Sciences, University of Edinburgh (host: Prof. Caroline Heycock). TÜBİTAK Overseas Research Grant.
- 6/05 9/05 Research Fellow. International Exchange Programme (Host: Prof. Mark Steedman). The Royal Society of Edinburgh. At ILLC, University of Edinburgh.
- 1/03 6/04 Research Fellow (Host: Prof. Mark Steedman). Lexical Resources for Case and Grammatical Relations: Abstraction and Computation in the Lexicon. Engineering and Physical Sciences Research Council (EPSRC), UK, Research Fellowship no. GR/S19134/01. At ILLC, University of Edinburgh.
- 9/02 1/03 Research Fellow. Lexical Resources for Case and Grammatical Relations. TÜBİTAK Overseas Research Fellowship (BAYG). At ILLC, University of Edinburgh.
- 1999 2001 Co-PI (with Prof. Erkan Korkmaz). Language pairing at functional structure: Turkish-English MT system using Lexical-Functional Grammar, Apptek-L&H Inc.
- 1994 1998 Co-PI (with Prof. Kemal Oflazer). *Turkish NLP Initiative* (TU-LANGUAGE), NATO Science Division.
- 1993 1995 Principal Investigator. A Grammar Architecture for Computational Analysis of Turkish (EEEAG-90), The Scientific and Technical Research Council, Turkey (TÜBİTAK).

#### AWARDS

- 2012 Best supervisor (METU): For Adnan Öztürel's ms thesis.
- 2012 Best supervisor (METU): For Kerem Eryılmaz's ms thesis.
- 2008 Turkish search engine bilgi.com. AGMLab Co. Elginkan Foundation National Award for Technology, awarded to the team. I was the chief scientific consultant.
- 2005 Best supervisor (Turkey): For Sercan Tutar's ms thesis. Awarded by Mustafa Parlar Foundation.
- Best supervisor (Turkey): For Meltem Turhan-Yöndem's phd thesis. Serhat Özyar Award awarded by Teacher's syndicate of Higher Education to MTY [Öğretim elemanlari derneği].

## SUPERVISION (at METU, unless specified)

- 2022 PhD Adnan Öztürel. Cross-level typing of the Logical Form for open-domain semantic parsing.
- 2018–19 PostDoc Özkan Aslan. Turkish multiword expressions from the perspective of form-meaning correspondence. TÜBİTAK scholar.
- 2016 PhD Subaşı, Ahmet. An Ambient semantic intelligence model for scientific research.
- 2015 PhD Sevinç, A. Müge. Finite-state Sign Language Morphophonology.
- 2015 PhD Demirşahin, Işın. The discourse structure of Turkish.
- 2012 PhD Özkan Kılıç. Power of Frequencies: N-grams and Semi-supervised morphological segmentation in Turkish.
- 2010 PhD Umut Özge. Information and Grammar: A study of the Turkish indefinites.
- 2001 PhD Meltem Turhan-Yöndem. Identifying The Interactions of Multi-criteria in Turkish Discourse Segmentation.
- 1998 PhD Ayşenur Birtürk. A Computational Analysis of Turkish Using the Government-Binding Approach.
- $2022~\mathrm{MSc}$  Melis Kızıldemir. Nominalization and argument structure: an experiment with the NOMLEX database.
- 2022 MSc Rojda Özcan. Semantic dimensionality reduction during language acquisition: a window into concept representation.
- 2021 MSc Gizem Nur Özdemir. Distributional investigation of some frequent Turkish derivational affixes for exploring their semantics.

- 2020 MSc Arzu Burcu Güven. Idioms as multi-word expressions in Turkish.
- $2020~\mathrm{Msc}$  Erolcan Er. A mathematical word problem solver for addition and subtraction problems.
- 2020 MSc Hüseyin Aleçakır. Joint learning of morphological segmentation, morpheme tagging, part-of-speech tagging, and dependency.
- 2019 MSc Oğuzhan Demir. Implementing the type-raising algorithm by grammar compiling.
- 2019 MSc Çağrı Şakiroğuları. Measuring empirical bias toward ergativity and accusativity.
- 2017 MSc Ahmet Üstün. Probabilistic learning of Turkish morphosemantics by latent syntax.
- 2016 Msc Serkan Kumyol. Morphological segmentation using Dirichlet process based Bayesian non-parametric models.
- 2015 MSc Ece Takmaz. A computational study of role of planning and affordances in learning.
- 2015 MSc Gözde Nasuhbeyoğlu. Power law distributions, self organizing behavior and popularity.
- 2014 MSc Özge Nilay Yalçın. Modeling and predicting the effect of culture in communication: a mixed study using naming game and social networks.
- 2014 MSc Enes Avcu. nouns-first, verbs-first and computationally-easier first: a preliminary design to test the order of acquisition.
- 2013 MSc Erdem Ünal. Overextension as evidence for deductive word learning: A theoretical examination.
- 2013 MSc Begüm Erten. Adapting and testing psycholinguistic toolboxes for Turkish visual word recognition studies.
- 2012 MSc Demirhan Büyüközcü. Discrete categorization of high-level traffic events in tunnels using attribute grammars.
- 2011 MSc Adnan Öztürel. A computational model of social dynamics of musical agreement.
- 2011 MSc Cağlar Gülcehre. Two approaches for collective learning with language games.
- $2011~\mathrm{MSc}$  Kerem Eryılmaz. Bootstrapping vocabulary in a language game: A weighted list approach.
- 2009 MSc Murat Yasavul. Aspects of control and complementation in Turkish.
- 2008 MSc Berfin Aktaş. Computational aspects of discourse annotation.
- 2008 MSc Işın Demirşahin. Connective position, argument order and information structure of discourse connectives in written Turkish texts.
- 2008 MSc Okan Kubus. An analysis of Turkish Sign Language (TID) Phonology and Morphology.
- 2008 MSc Burcu Ayşen Ürgen. A philosophical analysis of computational modeling in cognitive science.
- 2008 MA Aysun Kunduracı. Control as a syntax-semantics interface in a lexicalized grammar. (Ankara Univ., DTCF, Dept. of Linguistics).
- 2008 MSc Onur Çobanoğlu. Using Zipf frequencies as a representative measure in statistical active learning of natural language.
- 2006 MSc Çağrı Çöltekin. From Syllable to meaning: Effects of knowledge of syllable in learning the meaning-bearing units of language.
- 2006 MSc Kürşad Kurt. An examination of quantifier scope ambiguity in Turkish.
- 2006 MSc Ayça Müge Sevinç. Grammatical Relations and Word Order in Turkish Sign Language TiD.
- 2004 MSc Sercan Tutar. A Programming Language for Beginners based on Turkish Syntax.
- 2003 MSc Güneş Erkan. A Type System For Combinatory Categorial Grammar.
- 2003 MSc Umut Özge. A Tune-based Account of Turkish Information Structure.
- 2002 MSc Ruken Çakıcı. A Computational Interface For Syntax and Morphemic Lexicons.
- 2001 MSc Ceyhan Temürcü. Word Order Variations in Turkish: Evidence from Binding and Scope.
- 2001 MSc Evren Kapusuz. Refining the Representational Basis of the Construction-Integration Model of Text Comprehension with Syntactic Cues.
- 2000 MSc Burcu Karagöl-Ayan. Generation of Turkish Surface Form From a Morphemic Lexicon.
- 1999 MSc Selçuk Köprü. German to Turkish Translation using Structural Transfer.
- 1999 MSc Yasemin Altun. Machine Learning and Language Acquisition: A Model of Child's Learning of Turkish Morphophonology.

- 1998 MSc İzzet Pembeci. A Unification-based Tool for Learning Turkish Morphology.
- 1997 MSc Özgür Yüksel. Contextually Appropriate Anaphor/Pronoun Generation for Turkish.
- 1997 MSc Bahadır Pehlivantürk. Quasi-Logical Form to Case Frame Mapping for English to Turkish Machine Translation.
- 1996 MSc Tolga Yıldırım. X-windows Based Lexical Database Tool.
- 1996 MSc Onur Şehitoğlu. A Sign-based Phrase Structure Grammar for Turkish.
- 1996 MSc Serdar Murat Öztaner. A Word Grammar of Turkish with Morphophonemic Rules.
- 1995 MSc İlker Altıntaş. Incremental Conceptual Clustering Without Order Dependency.

#### **SERVICE**

2011-2020	Chair, Co	ognitive Science	department,	Informatics	Institute, METU.
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- 2015-2021 Designer and developer, CCGlab, Ankara, Lisbon.
- 2010-2011 Editorial board: Versita Publishers. For Linguistics series.
- 2010-2015 Evaluator: MUDEK/Eur-Ace accreditation for degrees related to computing.
- 2006 Organizer: Ankara Linguistic Circle (ALC).
- 2005 Lecturer: European Summer School in Logic, Language and Information (ESSLLI),
  - Edinburgh.
- 2002- Panelist: TÜBİTAK grants related to computing and language.
- 1996 Founder. METU Cogsci program. with D. Zeyrek, S. Bağçe, G. Tekman.
- $1996\text{-}2018 \qquad \text{Program design for Cognitive science: Phd, Ms with thesis, MS without thesis.}$
- $1994\text{-}2011 \qquad \text{Founder and director: Laboratory for the Computational Studies of Language (LcsL)},$ 
  - METU.
- 1993 Reviewer: Computational Linguistics, Lingua, Natural Language Engineering, Information Processing Management, Research in Linguistics [in Turkish], Elektrik,
  - NeMLAP, ACL, EMNLP, ESSLLI, DepLing, TALLIP, TAINN.
- 2014/2018~ PC co-chair, ISBCS.
- 1994 PC co-chair, TAINN.
- 1996 1997 Cognitive Science Graduate Program Design, METU.
- 1993 2000 ABET report and preparation, METU.
- 2001 2002 Advisor to chair, Computer Engineering, METU.
- 1992 1994 Vice chair, Computer Engineering, METU.

## TEACHING EXPERIENCE (at METU unless specified)

- 2020 Cogs579: Philosophy of Computer Science.
- 2018 CEng444: Language processors. (Compilers) RISC V, Python and Lisp.
- 2013 Cogs517: Philosophy of Cognitive Science. added: phil. of AI and computationalism.
- 2011  $\,$  Cogs502: Logic and programming. added: Python programming and lambda-calculus.
- 2010 Cogs541: Language Acquisition, Part II: Computationalism. With Deniz Zeyrek. METU.
- 2010 Cogs42: Combinators in syntax and semantics. (Taught as Combinatory Linguistics at Boğaziçi University, Spring 2011.)
- 2009 Cogs503: Introduction to Cognitive Science. Taught jointly by the department.
- 2008  $\,$  Cogs 519: Grounding language and cognition in perception. With Nicolas Bullot and Annette Hohenberger.
- 2006 CEng729: Syntax, Semantics and Computation: CCG.
- 2005 Combinatory Categorial Grammar and Linguistic Diversity. European Summer School on Logic, Language and Information (ESSLLI), at Herriot-Watt University, Edinburgh. With Mark McConville.
- 2004 Cogs532: Theoretical Linguistics.
- 1999 Cogs501: Algorithmic structures in cognition.
- 1998 Cogs514/CEng584: Cognitive Aspects of Language Processing.
- 1993 CEng563: Computational Linguistics. Ohio Univ.
- 1993 CEng562: Machine Learning.
- 1992 CEng424: Logic for Computer Science. Ohio University, Computer Science dept.

**OTHER COURSES TAUGHT** Algorithmic Structures in Cognition. Formal Languages and Abstract Machines. Programming Language Concepts. Introduction to Programming. Data Structures. Database Systems Design.

# SOME INVITED TALKS

SOME IN	TTED TALKS
7.8.2021	Dilbilimde temel sorular sormasak olmaz mı? [Can we get by in linguistics not asking fundamental questions?] Dilbilim Öğrenci Platformu [Linguistics Students' Forum].
6.5.2020	Idiosyncrasy in grammar. Boğaziçi Cognitive Science Colloq.
20.4.2019	Mandarin Chinese Double Nominatives. Xiangtan, China.
30.4.2017	Plans, Scripts, Discourse and Sentences, ISBCS IV, Hacettepe Univ.
17.2.2016	Learning to subcategorize for nominals and pronominals: Portuguese and Turkish (Univ. of Évora)
3.12.2015	Machine learning of clitics and its implications for language acquisition. (Univ. of Lisbon) $$
10.12.2014	Computationalism, pancomputationalism and explanation in cognitive science (Univ. Osnabrück)
8.12.2014	What seems to be unique about human recursion? (Univ. Bielefeld)
5.5.2014	Can computation give rise to meaning? (Boğaziçi Philosophy)
9.11.2012	Alan Turing: A century of computing (Bilkent University and METU)
9.5.2011 & 6.6.2011	Dependency, cognition and computation (Istanbul Technical University and Boğaziçi University)
11.1.2011 & 22.10.2010	Why is computationalism relevant to language acquisition? (Koç University, Psychology seminars; Psycholinguistics and Cognitive Science Meeting, at METU Informatics)
16.10.2009 19.12.2008 10.10.2008 3.4.2008 8.3.2008	Bir dilbilim yaklaşımı olarak radikal sözlükçülük [Radical lexicalism as a linguistic paradigm]. Anadolu Univ. Language and Philosophy seminars. Schönfinkel'den Dilbilime Anlam ve Dizim [Semantics and Syntax From Schönfinkel to Linguistics]. ODTU Felsefe Bol. 25. Yil 'Anlam' Kongresi. Meaning, form and adjacency: Schönfinkel's legacy. Ankara Linguistic Circle. What do we parse when we parse? Boğaziçi Univ. Linguistics Colloq. Computationalism as a philosophy of science in cognitive science. METU Philosophy and Cognition Workshop.
13.8.2007	Word learning as a search problem. Edinburgh Univ., Language Evolution and Computation (LEC) Seminars.
10.5.2007	Türkçe'de Ezgi: Sözdizim ve edimle ilişkisi [Turkish Intonation: Its relations to syntax and pragmatics]; with Umut Ozge and Asli Goksel. Mersin XXI. Dilbilim Kurultayi.
23.3.2007 March 2007 March 2007	Dil ne değildir? (What language is not) Abant İzzet Baysal Üniversitesi, Psikoloji. Type-dependence of Language. Ankara Linguistic Circle. Two notions of category in linguistics: Some (really naive) Algebra. METU Applied Mathematics Colloq.
19.1.2006	Lexical Integrity and Lexical Organisation. CL and Phonology Colloquium, Saarbrücken.
8.12.2004 5.11.2004 31.3.2004 2-3/2003	Kültür öncesi Dil [Language before culture]. Gercek Seminerleri, Ankara. Zihinsel Sözlükte Dilbilgisi [Mental grammar]. Hacettepe Dilbilim, Ankara. Parametric lexicons. ICCS/HCRC seminars, Edinburgh University. Lexical Origins of Word Order and Word Order Flexibility. Edinburgh Linguistic Circle, Antwerp Typology Seminars.

18.11.2003 Inflectional Morphology as Syntax. Edinburgh ICCS/HCRC Seminars. 9.11.2001 (Yapay) Zeka ve Dil [(Artificial) Intelligence and Language]. METU.

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