

# Prof. HÜSEYİN CEM BOZŞAHİN

## Personal Information

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## International Researcher IDs

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Publons / Web Of Science ResearcherID: AGR-4577-2022

ScopusID: 6507418522

Yoksis Researcher ID: 2846

## Education Information

Doctorate, Arizona State University, Computer Science And Engineering, United States Of America 1985 - 1990

Postgraduate, Middle East Technical University, Graduate School of Natural and Applied Sciences, Endüstri Mühendisliği (YI) (Tezli), Turkey 1982 - 1983

Undergraduate, Middle East Technical University, Faculty of Engineering, Department of Industrial Engineering, Turkey 1977 - 1982

## Foreign Languages

English, C1 Advanced

## Research Areas

Social Sciences and Humanities, Natural Sciences, Engineering and Technology

## Academic Titles / Tasks

Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, 2000 - 2011

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, 1993 - 1998

## Advising Theses

BOZŞAHİN H. C., Semantic dimensionality reduction during language acquisition:A window into concept representation, Postgraduate, R.ÖZCAN(Student), 2022

BOZŞAHİN H. C., Cross-level typing the logical form for open-domain semantic parsing, Doctorate, İ.ADNAN(Student), 2022

BOZŞAHİN H. C., Nominalization and argument structure: An experiment with the NOMLEX database, Postgraduate, M.KIZILDEMİR(Student), 2022

GÜNEL KILIÇ B., BOZŞAHİN H. C., Human presence detection in emergency situations using deep learning based audio-visual systems, Postgraduate, İ.GENECİ(Student), 2022

BOZŞAHİN H. C., Distributional investigation of some frequent turkish derivational affixes for exploring their semantics, Postgraduate, G.NUR(Student), 2021

BOZŞAHİN H. C., Idioms as multi-word expressions in Turkish, Postgraduate, A.Burcu(Student), 2020

BOZŞAHİN H. C., Joint learning of morphological segmentation, morpheme tagging, part-of-speech tagging, and dependency parsing, Postgraduate, H.Aleçakır(Student), 2020

BOZŞAHİN H. C., The effect of executive control training on emotional distraction during conflict resolution: a pupillometry study, Doctorate, Ş.Koç(Student), 2020

BOZŞAHİN H. C., A mathematical word problem solver for addition and subtraction problems, Postgraduate, M.Erolcan(Student), 2020

BOZŞAHİN H. C., Measuring empirical bias toward ergativity and accusativity, Postgraduate, Ç.Şakiroğulları(Student), 2019

BOZŞAHİN H. C., Implementing the type-raising algorithm by grammar compiling, Postgraduate, O.Demir(Student), 2019

Acartürk C., Bozşahin H. C., AN INVESTIGATION OF GRAMMATICAL PATTERNS IN USER PASSWORDS: A PROBABILISTIC CONTEXT-FREE GRAMMAR APPROACH , Postgraduate, R.KAAN(Student), 2018

BOZŞAHİN H. C., Probabilistic learning of Turkish morphosemantics by latent syntax, Postgraduate, A.ÜSTÜN(Student), 2017

BOZŞAHİN H. C., Morphological segmentation using Dirichlet process based bayesian non-parametric models, Postgraduate, S.KUMYOL(Student), 2016

BOZŞAHİN H. C., ZEYREK BOZŞAHİN D., An ambient semantic intelligence model for scientific research, Doctorate, A.SUBAŞI(Student), 2016

BOZŞAHİN H. C., Finite-state sign language morphophonology, Doctorate, A.MÜGE(Student), 2015

BOZŞAHİN H. C., ZEYREK BOZŞAHİN D., A turkish database for psycholinguistic studies: A corpus based study on frequency, age of acquisition, and imageability, Postgraduate, E.AHSEN(Student), 2015

BOZŞAHİN H. C., The discourse structure of Turkish, Doctorate, İ.DEMİRŞAHİN(Student), 2015

BOZŞAHİN H. C., A computational study on the role of planning and affordances in learning: Plan to learn vs. learn to plan, Postgraduate, E.KAMER(Student), 2015

BOZŞAHİN H. C., ACARTÜRK C., Power law distributions, self-organizing behavior and popularity, Postgraduate, D.GÖZDE(Student), 2015

BOZŞAHİN H. C., ZEYREK BOZŞAHİN D., Nouns-first, verbs-first and computationally-easier first: A preliminary design to test the order of acquisition, Postgraduate, E.AVCU(Student), 2014

BOZŞAHİN H. C., Modeling and predicting the effect of culture in communication: A mixed study using naming game and social networks, Postgraduate, Ö.NİLAY(Student), 2014

BOZŞAHİN H. C., Power of frequencies: N-grams and semi-supervised morphological segmentation in Turkish, Doctorate, Ö.KILIÇ(Student), 2013

BOZŞAHİN H. C., ZEYREK BOZŞAHİN D., Overextension as evidence for deductive word learning: A theoretical examination, Postgraduate, E.ÜNAL(Student), 2013

HACIHABİBOĞLU H., BOZŞAHİN H. C., Speech emotion recognition using auditory models, Postgraduate, E.YÜNCÜ(Student), 2013

BOZŞAHİN H. C., Discretized categorization of high level traffic activities in tunnels using attribute grammars, Postgraduate, D.BÜYÜKÖZCÜ(Student), 2012

BOZŞAHİN H. C., Discretized categorization of high level traffic activities in tunnels using attribute grammars, Postgraduate, D.Büyüközcü(Student), 2012

BOZŞAHİN H. C., Prospective duration judgments: the role of attention and secondary tasks, Postgraduate, H.Duzcu(Student), 2011

BOZŞAHİN H. C., Two approaches for collective learning with language games, Postgraduate, Ç.Gülçehre(Student), 2011

BOZŞAHİN H. C., Bootstrapping shared vocabulary in a population-weighted lists with probabilistic choice, Postgraduate, K.ERYILMAZ(Student), 2011

BOZŞAHİN H. C., A computational model of social dynamics of musical agreement, Postgraduate, İ.ADNAN(Student), 2011

BOZŞAHİN H. C., ZEYREK BOZŞAHİN D., Intonation structure and intonation in SVO and OVS sentences in spoken Russian,

Postgraduate, E.GHÎNDA(Student), 2010

BOZŞAHİN H. C., Grammar and information : a study of Turkish indefinites, Doctorate, U.Özge(Student), 2010

BOZŞAHİN H. C., Aspects of control and complementation in Turkish, Postgraduate, Ş.MURAT(Student), 2009

BOZŞAHİN H. C., Using ZipF frequencies as a representativeness measure in statistical active learning of natural language, Postgraduate, O.ÇOBANOĞLU(Student), 2008

BOZŞAHİN H. C., Connective position, argument order and information structure of discourse connectives in written Turkish texts, Postgraduate, İ.DEMİRŞAHİN(Student), 2008

BOZŞAHİN H. C., Sözdizim-anlambilim etkileşimi olarak sözlüksel dilbilgisinde denetleme, Postgraduate, A.KUNDURACI(Student), 2008

BOZŞAHİN H. C., Computational aspects of discourse annotation, Postgraduate, B.Aktaş(Student), 2008

BOZŞAHİN H. C., Computational aspects discourse annotation, Postgraduate, B.AKTAŞ(Student), 2008

BOZŞAHİN H. C., BAÇÇE S., A philosophical analysis of computational modeling in cognitive science, Postgraduate, B.AYŞEN(Student), 2007

BOZŞAHİN H. C., From syllable to meaning: Effects of knowledge of syllable in learning the meaning bearing units of language, Postgraduate, Ç.ÇÖLTEKİN(Student), 2006

BOZŞAHİN H. C., Grammatical relations and word order in Turkish sign language (TİD), Postgraduate, A.MÜGE(Student), 2006

BOZŞAHİN H. C., An examination of quantifier scope ambiguity in Turkish, Postgraduate, K.KURT(Student), 2006

BOZŞAHİN H. C., A programming language for beginners based on Turkish syntax, Postgraduate, S.TUTAR(Student), 2004

BOZŞAHİN H. C., A type system for combinatory categorial grammar, Postgraduate, G.Erkan(Student), 2003

BOZŞAHİN H. C., A type system for combinatory categorial grammer, Postgraduate, E.GÜNEŞ(Student), 2003

BOZŞAHİN H. C., ZEYREK BOZŞAHİN D., A tune-based account of Turkish information structure, Postgraduate, U.ÖZGE(Student), 2003

BOZŞAHİN H. C., Bozşahin H., A tune-based account of Turkish information structure, Postgraduate, U.Özge(Student), 2003

BOZŞAHİN H. C., A Computational interface for syntax and morphemic lexicons, Postgraduate, R.ÇAKICI(Student), 2002

BOZŞAHİN H. C., Semantic plausibility and category effects on unbounded dependency processing in Turkish relative clauses, Postgraduate, Ş.BARIŞ(Student), 2001

BOZŞAHİN H. C., ZEYREK BOZŞAHİN D., Refining the representational basis of the construction-integration model of text comprehension with syntactic cues, Postgraduate, E.KAPUSUZ(Student), 2001

BOZŞAHİN H. C., Identifying the interactions of multi-criteria in Turkish discourse segmentation, Doctorate, M.TURHAN(Student), 2001

BOZŞAHİN H. C., Generation of Turkish surface form from a morphemic lexicon, Postgraduate, B.KARAGÖL(Student), 2000

BOZŞAHİN H. C., A Web-based source code browser for pascal, Postgraduate, B.MEHMET(Student), 2000

BOZŞAHİN H. C., Extendible structural transfer: A case for German to Turkish transtation, Postgraduate, S.KÖPRÜ(Student), 1999

BOZŞAHİN H. C., Machine learning and language acquisition: A model of child's learning of Turkish morphophonolog, Postgraduate, Y.ALTUN(Student), 1999

BOZŞAHİN H. C., A Computational analysis of Turkish using the government-binding approach, Doctorate, A.BİRTÜRK(Student), 1998

BOZŞAHİN H. C., A Computational analysis of Turkish using the government-binding approach, Doctorate, A.Birtürk(Student), 1998

BOZŞAHİN H. C., A unification-based tool for learning of Turkish morphology, Postgraduate, İ.PEMPEÇİ(Student), 1998

BOZŞAHİN H. C., Contextually appropriate anaphor/Pronoun generation for Turkish, Postgraduate, Ö.YÜKSEL(Student), 1997

BOZŞAHİN H. C., Qusai-logical form to case frame mapping for english to turkish machine translation, Postgraduate, B.PEHLİVANTÜRK(Student), 1996

BOZŞAHİN H. C., A Sign based phrase structure gremmar for Turkish, Postgraduate, O.TOLGA(Student), 1996

BOZŞAHİN H. C., A Word grammar of Turkish with morrphophonemic rules, Postgraduate, S.MURAT(Student), 1996

BOZŞAHİN H. C., Incremental conceptual clustering without order dependency, Postgraduate, N.İLKER(Student), 1995  
BOZŞAHİN H. C., A Quota system for controlling network bandwidth utilization, Postgraduate, C.ÇELİK(Student), 1995

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Referentiality and configurationality in the idiom and the phrasal verb**  
Bozşahin H. C.  
JOURNAL OF LOGIC, LANGUAGE AND INFORMATION, vol.32, no.2, pp.175-207, 2023 (SCI-Expanded)
- II. **Joint learning of morphology and syntax with cross-level information flow**  
Can B., Alecakir H., Manandhar S., Bozşahin H. C.  
NATURAL LANGUAGE ENGINEERING, vol.20, pp.1-33, 2022 (SCI-Expanded)
- III. **Computers Aren't Syntax All the Way Down or Content All the Way Up**  
BOZŞAHİN H. C.  
MINDS AND MACHINES, vol.28, no.3, pp.543-567, 2018 (SCI-Expanded)
- IV. **Intonation in the grammar of Turkish**  
ÖZGE U., BOZŞAHİN H. C.  
LINGUA, vol.120, no.1, pp.132-175, 2010 (SSCI)
- V. **The combinatory morphemic lexicon**  
Bozsahin C.  
COMPUTATIONAL LINGUISTICS, vol.28, no.2, pp.145-186, 2002 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Word order as projection**  
BOZŞAHİN H. C.  
Dilbilim Araştırmaları, 2014 (Peer-Reviewed Journal)
- II. **Söylem ve tutarlılık bağları**  
Turan Ü. D., Zeyrek Bozşahin D., Bozşahin H. C.  
DILBILIM ARASTIRMALARI, vol.2, pp.41-66, 2012 (Scopus)
- III. **Serialization and the verb in Turkish coordinate reduction**  
BOZŞAHİN H. C.  
Dilbilim araştırmaları, 2011 (Peer-Reviewed Journal)
- IV. **Contextually appropriate reference generation**  
Yuksel O., BOZŞAHİN H. C.  
Natural Language Engineering, vol.8, no.1, pp.69-89, 2002 (Scopus)
- V. **Dilbilgisi, bilişim ve bilişsel bilim**  
BOZŞAHİN H. C., ZEYREK BOZŞAHİN D.  
Dilbilim araştırmaları, 2000 (Scopus)
- VI. **Combinatory Logic and Natural Language Parsing**  
Bozşahin H. C.  
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.5, no.2, pp.347-357, 1997 (Scopus)
- VII. **Ulamsal dilbilgisi ve Türkçe**  
BOZŞAHİN H. C.  
Dilbilim araştırmaları, 1996 (Peer-Reviewed Journal)
- VIII. **Memory-based hypothesis formation: Heuristic learning of commonsense causal relations from text**  
Cem Bozsahin H. C., Findler N. V.  
Cognitive Science, vol.16, no.4, 1992 (Scopus)
- IX. **Join strategies using data space partitioning**

Ozkarahan E. A., BOZŞAHİN H. C.  
New Generation Computing, vol.6, no.1, pp.19-39, 1988 (Scopus)

## Books & Book Chapters

- I. **Command and order by type substitution: Another way to look at word order.**  
Bozşahin H. C.  
in: Word order in Turkish, Sumru Ozsoy, Editor, Springer-Verlag , Geneve, pp.179-216, 2018
- II. **Wide-coverage parsing, semantics and morphology.**  
Bozşahin H. C.  
in: Turkish Natural Language Processing, K. Oflazer and M. Saraclar, Editor, Springer-Verlag , Berlin, pp.153-174, 2018
- III. **Turkish Discourse Bank: Connectives and Their Configurations.**  
ZEYREK BOZŞAHİN D., demirşahin I., BOZŞAHİN H. C.  
in: Turkish Natural Language Processing (pp. 337-356). Springer, Cham., Kemal Oflazer, Murat Saraçlar, Editor, Springer, pp.337-356, 2018
- IV. **Turkish Discourse Bank: Connectives and Their Configurations**  
Zeyrek Bozşahin D., Demirşahin I., Bozşahin H. C.  
in: Turkish Natural Language Processing, Kemal Oflazer, Murat Saraçlar, Editor, Springer, London/Berlin , New-York, pp.337-356, 2018
- V. **What is a computational constraint?**  
BOZŞAHİN H. C.  
in: Computing and Philosophy, Muller, Vincent, Editor, Springer, pp.3-16, 2016
- VI. **Verbal Categories in Turkish Sign Language**  
BOZŞAHİN H. C., Sevinç A. M.  
in: The Uppsala Meeting of International Conference on Turkish Linguistics, Csato, Eva, Karakoc Birsnel, Menz Astrid, Editor, Harrasowitz Verlag, Wiesbaden, pp.220-229, 2016
- VII. **natural recursion doesn't work that way**  
BOZŞAHİN H. C.  
in: Fundamental issues in Artificial Intelligence, , Editor, Springer, pp.95-112, 2016
- VIII. **Properties as Anaphors**  
Bozşahin H. C.  
in: MIT Working Papers in Linguistics, Umut Ozge, Editor, The MIT Press, Cambridge (MA), USA , Massachusetts, pp.39-50, 2013
- IX. **Combinatory Linguistics**  
Bozşahin H. C.  
Mouton de Gruyter , Berlin, 2012
- X. **Lexical rules and Lexical Organization: Productivity in the Lexicon**  
ŞEHİTOĞLU O. T., BOZŞAHİN H. C.  
in: Breadth and Depth of Semantic Lexicons, Evelyne Viegas, Editor, Springer, pp.39-57, 1999

## Refereed Congress / Symposium Publications in Proceedings

- I. **Durumun tek kaynağı olarak fiil**  
Bozşahin H. C.  
Ulusal Dilbilim Kurultayı, Kayseri, Turkey, 11 May 2023, pp.1-3
- II. **Paracompositionality, MWEs and argument substitution**  
BOZŞAHİN H. C., Guven A. B.  
Formal Grammar Conference, 11 August 2018

- III. **A Turkish database for psycholinguistic studies**  
acar e. a., ZEYREK BOZŞAHİN D., KURFALI M., BOZŞAHİN H. C.  
Language Resources and Evaluation, Portoroz, Slovenia, 23 May 2016, vol.10
- IV. **A Turkish database for psycholinguistic studies based on frequency age of acquisition and imageability**  
Acar E. A., ZEYREK BOZŞAHİN D., KURFALI M., BOZŞAHİN H. C.  
LREC 2016, 10th edition of the Language Resources and Evaluation Conference, 23-28 May 2016, Portorož, Slovenia, 23 - 28 May 2016, pp.3600-3606
- V. **Turkish Resources for Visual Word Recognition**  
Erten B., BOZŞAHİN H. C., ZEYREK BOZŞAHİN D.  
9th International Conference on Language Resources and Evaluation (LREC), Reykjavik, Iceland, 26 - 31 May 2014, pp.2106-2110
- VI. **Discourse relation configurations in Turkish and an annotation environment**  
Aktaş B., BOZŞAHİN H. C., ZEYREK BOZŞAHİN D.  
4th Linguistic Annotation Workshop, LAW 2010, Uppsala, Sweden, 15 - 16 July 2010, pp.202-206
- VII. **Deriving the predicate-argument structure for a free word order language**  
BOZŞAHİN H. C.  
36th Annual Meeting of the Association for Computational Linguistics and 17th International Conference on Computational Linguistics, COLING-ACL 1998, Montreal, Canada, 10 - 14 August 1998, vol.1, pp.167-173
- VIII. **Morphological productivity in the lexicon**  
Sehitoglu O. T., Bozsahin H. C.  
Workshop on Breadth and Depth of Semantic Lexicons, Santa Cruz, Bolivia, 28 June 1996, pp.105-112

## Episodes in the Encyclopedia

- I. **Combinatory Categorical Grammar and Turkish**  
Bozsahin H. C.  
Brill, Leiden , pp.1-2, 2022

## Supported Projects

BOZŞAHİN H. C., ÖTER F., AKKUŞ S., Project Supported by Higher Education Institutions, Mantıksal Gösterimden Dil İfadesi Üretmenin Makina Öğrenimi, 2018 - 2019

## Metrics

Publication: 33  
Citation (WoS): 36  
Citation (Scopus): 93  
H-Index (WoS): 3  
H-Index (Scopus): 6

## Non Academic Experience

METU  
METU  
University of Edinburgh  
University of Edinburgh

University of Edinburgh and Heriot-Watt University

University of Edinburgh

Arizona State University

METU

Ohio University

METU