ILYAS CICEKLI

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PERSONAL DATA

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PROFESSIONAL SUMMARY

Computer Science Professor with 30-year experience in teaching and research. Taught various undergraduate and graduate computer science courses at universities in the United States and Turkey after receiving my PhD in Computer Science from Syracuse University, USA. Supervised 8 Ph.D. dissertations and 27 M.S. theses. Published more than 80 scientific articles including 30 journal articles. Mainly worked in the natural language processing research area and applied machine learning methods in different natural language processing research problems. Completed 7 research projects.

Performed departmental administrative duties such as leading the computer engineering department, maintaining the computer engineering curriculum and hiring new faculty while serving as the department chair of the computer engineering department of Hacettepe University, Turkey. Coordinated existing graduate programs, prepared new graduate programs, and served at the university senate while serving as the dean of the informatics institute of Hacettepe University. Helped to establish the online M.S. computer science program, participated in the interview process for hiring new faculty for this program, and taught various computer science courses while serving as a full teaching professor at Syracuse University, USA. Taught computer science courses, supervised graduate students, performed research, and organized conferences while working as a faculty member at Bilkent Universty and University of Central Florida. Developed commercial compilers for Prolog programming language while working as a research associate at an US company.

EDUCATION

Ph.D. in Computer and Information Science   January 1991
Syracuse University, Syracuse, NY, USA

M.S. in Computer Science   June 1985
Syracuse University, Syracuse, NY, USA

B.S in Computer Engineering   June 1982
Middle East Technical University, Ankara, Turkey

EMPLOYMENT HISTORY

Dept. of Computer Engineering, Hacettepe University, Ankara, Turkey
Feb. 2011 – present   Full Professor of Computer Engineering
Feb. 2021 – Apr. 2024   Department Chair of Computer Engineering
Feb. 2011 – present   Head of Computer Science Division

Dept. of Computer Science, Syracuse University, Syracuse, NY, USA
Jan. 2017 – Dec. 2019   Visiting Teaching Professor

Informatics Institute, Hacettepe University, Ankara, Turkey
Mar. 2012 – Aug. 2016   Dean of Informatics Institute
Mar. 2012 – Aug. 2016   Member of Hacettepe University Senate

Dept. of Computer Science, University of Central Florida, FL, USA
Sep. 2001 – Aug. 2003   Visiting Associate Professor

Dept. of Computer Engineering, Bilkent University, Ankara, Turkey
Sep. 1992 – Jan. 2011   Assistant Professor & Associate Professor

Applied Logic Systems Inc., Syracuse, NY, USA
Sep. 1989 – Aug. 1992   Research Associate

Dept. of Computer Science, Syracuse University, Syracuse, NY, USA
Sep. 1988 – Aug. 1989   Research Associate
Jan. 1984 – Aug. 1988   Research Assistant

Dept. of Computer Engineering, Middle East Technical University, Ankara, Turkey
Jan. 1982 – Jan. 1983   Computer Programmer
Sep. 1980 – Dec. 1981   Homework Grader

EMPLOYMENT SUMMARY

Hacettepe University, Ankara, Turkey   **2011 - present**

I have been a full professor of computer engineering at Hacettepe University, Turkey since February 2011. I am also the head of the Computer Science Division in the Computer Engineering Department at Hacettepe University since February 2011. Additionally, I served as the chair of the Computer Engineering Department from 2021 to 2024. As a faculty member, I performed my teaching and research activities and served on department committees. As the department chair, I led the department, coordinated all departmental activities, and hired new faculty members for the department.

I also served as the Dean of the Informatics Institute at Hacettepe University from 2012 to 2016. In this role, I coordinated all graduate programs at the institute. During my tenure, I established two new graduate programs: "Data and Knowledge Engineering" and "Information Security". In addition to coordinating all graduate programs, I hired new faculty members for the institute and represented the Informatics Institute in the university senate.

Syracuse University, NY, USA   **2017 - 2019**

I was a full teaching professor in the Computer Science Department at Syracuse University from 2017 to 2019. Before the COVID-19 pandemic, I helped to establish the online M.S. program in computer science at Syracuse University. I taught various graduate computer science courses in this online M.S. program, in addition to the face-to-face undergraduate and graduate courses that I taught in the department. Besides teaching, I also evaluated student applications and assisted in the hiring process for new faculty for this online program. Teaching in this online graduate program before the pandemic provided me with valuable experience in online education, which I utilized to design the forced online education at the Computer Engineering Department, Hacettepe University as the head of department during the COVID-19 pandemic. Although I was a teaching professor at Syracuse University, I continued my research activities there, including research with my graduate students at Hacettepe University.

Bilkent University, Ankara, Turkey   **1992 - 2011**

After receiving my PhD in Computer Science from Syracuse University, I joined the Computer Engineering Department at Bilkent University as a faculty member in 1992. As an assistant and associate professor, I focused my research mainly on natural language processing and taught undergraduate and graduate computer science courses. I designed several new courses, supervised graduate students, and served on department committees. In addition to my research and teaching activities, I chaired an artificial intelligence conference during my tenure there.

University of Central Florida, FL, USA   **2001 - 2003**

I worked as a visiting associate professor in the Computer Science Department at the University of Central Florida (UCF) from 2001 to 2003. During this time, I taught both graduate and undergraduate courses. I conducted research in collaboration with faculty members in the department and continued supervising my graduate students at Bilkent University. In addition to my research and teaching activities, I also chaired an international computer science conference held at UCF.

Applied Logic Systems Inc., Syracuse, NY, USA   **1989 - 1992**

I worked as a research associate at Applied Logic Systems Inc. in Syracuse during the final years of my PhD studies at Syracuse University and immediately after obtaining my PhD degree. We developed and sold commercial compilers for the Prolog programming language. I was responsible for the implementation of the Prolog compiler in the Windows environment.

Syracuse University, NY, USA   **1984 - 1989**

During my graduate studies (M.S. and PhD) in the Computer Science Department at Syracuse University, I also worked as a research assistant and research associate. During this time, I worked on my thesis, which involved designing and implementing a compiler for a new programming language known as MetaProlog, an extension of the Prolog programming language. My thesis work was a part of a research project supported by the US Air Force.

TEACHING EXPRIENCE

I have more than 30 years teaching experience. I have taught computer science courses on undergraduate and graduate levels at the following US universities and Turkish universities.

- Department of Computer Engineering, Hacettepe University, Ankara, Turkey
- Department of Computer Science, Syracuse University, Syracuse, NY, USA
- Department of Computer Science, University of Central Florida, FL, USA
- Department of Computer Engineering, Bilkent University, Ankara Turkey

The education language at Turkish universities where I taught courses is English and all the courses that I taught at Turkish universities are in English. Before COVID-19 pandemic, I helped to establish the online computer science M.S. program at Syracuse University while serving as a full teaching professor there and I taught different online graduate courses at that online computer science graduate program. The undergraduate and graduate courses that I taught at these universities are as follows.

Undergraduate Courses at Hacettepe Univ.
- Automata and Formal Languages
- Algorithm Analysis
- Data Structures and Algorithms
- Senior Design Project

Graduate Courses at Hacettepe Univ.
- Natural Language Processing
- Machine Learning
- Artificial Intelligence
- Data Mining
- Advanced Analysis of Algorithms
- Compiler Construction

Undergraduate Courses at Syracuse Univ.
- Programming Languages
- Data Structures and Algorithms
- Object Oriented Programming

Graduate Courses at Syracuse Univ.
- Data Mining
- Mathematical Basis for Computing
- Structured Programming and Formal Methods
- Advanced Data Structures and Algorithms
- Python Programming for Finance

Undergraduate Courses at Bilkent Univ.
- Machine Learning
- Artificial Intelligence
- Compiler Design
- Data Structures
- Fundamental Structures of Computer Science
- Symbolic Programming
- Logic Programming and Expert Systems
- Algorithms and Programming I & II

Graduate Courses at Bilkent Univ.
- Natural Language Processing
- Topics in Logic Programming

Undergraduate Courses at Univ. of Central Florida
- Object Oriented Programming

Graduate Courses at Univ. of Central Florida
- Natural Language Processing
- Program Analysis
- Compiler Design

RESEARCH INTERESTS

My main current research interest is Natural Language Processing (NLP). I have actively worked on different research problems in NLP area. I applied machine learning approaches to NLP research problems and published more than 80 scientific articles. Some of my specific current and past research interest areas in NLP domain are as follows:

- *Social Media Text Analysis* – Worked on text classification problems such as protest event detection on Twitter data and offensive language defection.

- *Example Based Machine Translation* – Worked on an example-based machine translation system between English and Turkish. Developed a system which learns translation templates from bilingual translation examples using machine learning techniques.

- *Text Summarization* – Worked on text summarization and key-phrase extraction problems. Pioneered the usage of lexical chain approach on text summarization and key-phrase extraction problems.

- *Information Extraction* – Worked on named-entity recognition and relation extraction problems in information extraction area.

- *Part of Speech Tagging* – Developed a morphological disambiguator tool for Turkish. Also developed morphological disambiguator tool for Kazakh language.

- *Dependency Parsing* – Developed parsers for Turkish using dependency parsing approach.

- *Other NLP Problems* – Worked on some other NLP problems such as plagiarism detection, generation of Turkish sentences from interlingua representations, recommendation systems and text-to-speech system for Turkish.

RESEARCH GRANTS

1. **Automated Recording of Milking System Information Using Internet of Things Systems**   **Researcher**
   2023 to present

- Funded by TUBITAK (The Scientific and Technical Research Council of Turkey)
- Project Number: EEEAG-123E255
- Objective: To design an internet-of-things-based hardware and software system that automatically identifies animals entering the milking area

2. **Automatic Summarization and Keyphrase Extraction**   **Principal Investigator**
   2007 to 2010

- Funded by TUBITAK (The Scientific and Technical Research Council of Turkey)
- Project Number: EEEAG-107E151
- Objective: To develop summarization keyphrase extraction systems for Turkish and English

3. A Framework for Personal Video Information Management Systems   **Researcher**

2007 to 2010

- Funded by TUBITAK (The Scientific and Technical Research Council of Turkey)
- Project Number: EEEAG-107234
- Objective: To develop a framework for video information systems

4. New Information Society Technologies for Turkey   **Researcher**

2006 to 2009

- Funded by TUBITAK (The Scientific and Technical Research Council of Turkey)
- Project Number: IST-TURKEY
- Objective: To enhance the research capability of Computer Engineering and Electrical Engineering Departments of Bilkent University, and of Turkey at large, by reinforcing and proliferating the ongoing innovative IST-Research activities at these two departments so as to attain the active participation in European FP7 projects.

5. Turkish Text-to-Speech System   **Principal Investigator**

2000 to 2002

- Funded by TUBITAK (The Scientific and Technical Research Council of Turkey)
- Project Number: EEEAG-100E008
- Objective: To develop a Text-to-Speech system for Turkish using concatenation method.

6. Learning Translation Templates from Bilingual Translation Examples Using Machine Learning Techniques   **Principal Investigator**

1997 to 1999

- Funded by TUBITAK (The Scientific and Technical Research Council of Turkey)
- Project Number: EEEAG-244
- Objective: To develop a bi-directional translation system which can work between any two language pairs. In the method used in this project, translation templates for a pair of language are learned from a set of translation examples by using machine learning techniques.

7. Turkish Natural Language Processing Initiative: Developing Computational Foundations and Applications for Natural Language Processing in Turkish   **Researcher**

1993 to 1998

- Funded by NATO
- Project Number: 7.TU-LANGUAGE
- Objective: To develop methods, computer software and other computational resources to perform natural language processing in Turkish.

PUBLICATIONS

Articles in Refereed Journals:

1. Mustafa Kaya, and Ilyas Cicekli, **A Hybrid Approach for Automated Short Answer Grading**, IEEE Access, Vol. 12, (2024), pp: 96332-96341.

2. Farhad Khalilzadeh, and Ilyas Cicekli, **REHREC: Review Effected Heterogeneous Information Network Recommendation System**, IEEE Access, Vol. 12, (2024), pp: 42751-42760.

3. M. H. Zadeh, and Ilyas Cicekli, **Protest Event Analysis: A New Method Based on Twitter's User Behaviors**, Information Technology and Control, Vol. 52, No.2, (2023), pp:457-470.

4. Omer Sahin, Ilyas Cicekli, and Gonenc Ercan,**. Learning term weights by overfitting pairwise ranking loss**. Turkish Journal of Electrical Engineering & Computer Sciences, Vol. 30.5, (2022). pp:1914-1930.

5. Kadir Yalcin, Ilyas Cicekli, and Gonenc Ercan, **An external plagiarism detection system based on part-of-speech (POS) tag n-grams and word embedding**, Expert Systems with Applications, Vol. 197, (2022), pp: Article 116677.

6. Samira Karimi Mansoub, Gönenç Ercan, and Ilyas Cicekli, **Selective personalization and group profiles for improved web search personalization**, Turkish Journal of Electrical Engineering & Computer Sciences, Vol. 28 (3), (2020), pp:1631–1643.

7. Merve Selcuk-Simsek, and Ilyas Cicekli, **Bidirectional Machine Translation between Turkish and Turkish Sign Language: A Data-Driven Approach**, International Journal on Natural Language Computing (IJNLC), Vol. 6, No.3, (2017), pp:33-46.

8. Gonenc Ercan and Ilyas Cicekli, **Topic segmentation using word-level semantic relatedness functions**, Journal of Information Science, Vol. 42, No. 5, (2016), pp:597-608.

9. Gulshat Kessikbayeva and Ilyas Cicekli, **A Rule Based Morphological Analyzer and A Morphological Disambiguator for Kazakh Language**, Linguistics and Literature Studies, Vol. 4(1), (2016), pp:96-104.

10. Mucahit Kutlu, and Ilyas Cicekli, **Noun Phrase Chunking for Turkish Using a Dependency Parser**, Information Sciences and Systems 2015, Lecture Notes in Electrical Engineering, Vol. 363, Springer Verlag, (2016), pp:381-391.

11. Gonenc Ercan and Ilyas Cicekli, **Keyphrase extraction through query performance prediction**, Journal of Information Science, Vol. 38, No. 5, (2012), pp:476-488.

12. Makbule Gulcin Ozsoy, Ilyas Cicekli, and Ferda Nur Alpaslan, **Text Summarization using Latent Semantic Analysis**, Journal of Information Science, Vol. 37, No. 4, (2011) pp:405-417.

13. Turhan Daybelge, and Ilyas Cicekli, **A Ranking Method for Example Based Machine Translation Results by Learning from User Feedback**, Applied Intelligence, Vol. 35, no. 2, (2011), pp:296-321.

14. Serhan Tatar, and Ilyas Cicekli, **Automatic Rule Learning Exploiting Morphological Features for Named Entity Recognition in Turkish**, Journal of Information Science. Vol 37, No. 2, (2011), pp: 137-151.

15. Ergin Soysal , Ilyas Cicekli, and Nazife Baykal, **Design and Evaluation of an Ontology Based Information Extraction System for Radiological Reports,** Computers in Biology and Medicine, Vol. 40, (2010) pp: 900-911.

16. Kezban Demirtas, Nihan Kesim Cicekli, and Ilyas Cicekli, **Automatic Categorization and Summarization of Documentaries**, Journal of Information Science, Vol 36, No. 6, (2010), pp: 671-689.

17. Mücahid Kutlu, Celal Cığır, and Ilyas Cicekli, **Generic Text Summarization for Turkish**, The Computer Journal, Vol. 53, No. 8, (2010), pp. 1315-1323.

18. Serhan Tatar, and Ilyas Cicekli, **Two Learning Approaches for Protein Name Extraction**, Journal of Biomedical Informatics, Vol 42, No. 6, (2009) pp:1046-1055.

19. Onur Aydın, Nihan Kesim Cicekli, Ilyas Cicekli, **Automated Web Services Composition with the Event Calculus**, Lecture Notes in Computer Science 4995, Engineering Societies in the Agents World VIII , Springer Verlag, (2008), pp: 142-157. (8th International Workshop in "Engineering Societies in the Agents World" (ESAW07), Athens, Greece, 2007, Revised Selected Papers).

20. Guzen Erozel, Nihan Kesim Cicekli, and Ilyas Cicekli, **Natural Language Querying for Video Databases**, Information Sciences, Vol. 178, No. 12, (2008), pp:2534-2552.

21. Gonenc Ercan, and Ilyas Cicekli, **Lexical Cohesion Based Topic Modeling for Summarization**, Lecture Notes in Computer Science 4919, Computational Linguistics and Intelligent Text Processing, Springer Verlag, (2008), pp: 582-592. (9th International Conference, CICLing 2008, Haifa, Israel, February 17-23, 2008. Proceedings).

22. Gonenc Ercan, and Ilyas Cicekli, **Using Lexical Chains for Keyword Extraction**, Information Processing & Management, Vol 43, No. 6, (2007), pp: 1705-1714.

23. Ilyas Cicekli, and Nihan Kesim Cicekli, **Generalizing Predicates with String Arguments**, Applied Intelligence, Vol. 25, No. 1, (2006), pp: 23-36.

24. Nihan Kesim Cicekli, and Ilyas Cicekli, **Formalizing the Specification and Execution of Workflows using the Event Calculus**, Information Sciences, Vol. 176, No. 15, (2006), pp: 2227-2267.

25. Ilyas Cicekli, **Inducing translation templates with type constraints**, Journal of Machine Translation, Vol. 19, (2005), pp: 283-299.

26. Ayse Pinar Saygin, and Ilyas Cicekli, **Pragmatics in Human-Computer Conversations**, Journal of Pragmatics, Vol. 34, No. 3, (2002), pp: 227-258.

27. Ilyas Cicekli, and H. Altay Güvenir, **Learning Translation Templates from Bilingual Translation Examples**, Applied Intelligence, Vol. 15, No. 1, (2001), pp: 57-76.

28. Ayse Pinar Saygin, Ilyas Cicekli, and Varol Akman, **Turing Test: 50 Years Later**, Minds and Machines, Vol. 10, No. 4., (2000), pp: 463-518 .

29. H. Altay Güvenir, and Ilyas Cicekli, **Learning Translation Templates from Examples**, Information Systems, Vol. 23, No. 6, (1998), pp: 353-363.

30. Ilyas Cicekli, **Abstract MetaProlog Engine**, Journal of Logic Programming , Vol 34(3), March 1998, pp:169-200.

31. Zeynep Oz, and Ilyas Cicekli, **Ordering Translation Templates by Assigning Confidence Factors**, Lecture Notes in Computer Science 1529, Springer Verlag, (1998), pp:51-61.

32. Murat Temizsoy, and Ilyas Cicekli, **An Ontology-Based Approach to Parsing Turkish Sentences**, Lecture Notes in Computer Science 1529, Springer Verlag, (1998), pp:124-135.

33. Ilyas Cicekli, **Theories and Proofs in Fault Diagnosis**, Lecture Notes in Computer Science 1480, Springer Verlag, (1998), pp:181-194.

34. Ilyas Cicekli, **An Intelligent Backtracking Schema in A Logic Programming Environment**, ACM SIGPLAN, Vol 32(3), March 1997, pp:42-50.

35. Turgay Korkmaz, and Ilyas Cicekli, **Generation of Turkish Verbal Groups with Systemic-Functional Grammar**, ELEKTRIK, Turkish Journal of Electrical Engineering and Computer Sciences, Vol 4, 1996, pp:78-88.

36. Bowen, K.A., Buettner, K.A., Cicekli, I., and Turk, A., **A Fast Incremental Portable Prolog Compiler** , <u>Lecture Notes in Computer Science</u> 225, Springer-Verlag, New York, 1986, pp:650-656.

Chapters in Books:

1. Servet Tasci and Ilyas Cicekli, **Content-Based News Recommendation: Comparison of Time-Based System and Keyphrase-Based System**, in: Knowledge Discovery, Knowledge Engineering and Knowledge Management, eds. Fred, A., Dietz, J. L. G., Aveiro, D., Liu, K., Filipe, J., Communications in Computer and Information Science, Vol. 553, Springer, pp: 84-98.

2. Ilyas Cicekli, and H. Altay Güvenir, **Learning Translation Templates from Bilingual Translation Examples,** in: Recent Advances in Example-Based Machine Translation, Carl, M., and Way, A. (eds), The Kluwer Academic Publishers, Boston, 2003, pp:247-278.

3. Ayse Pinar Saygin, Ilyas Cicekli, and Varol Akman, **Turing Test: 50 Years Later**, in: The Turing Test: The Elusive Standard of Artificial Intelligence, James H. Moor (ed.), Springer, 2003, pp. 23-78 (reprint of our previous journal article)

4. Ilyas Cicekli, **Design and Implementation of An Abstract MetaProlog Engine for MetaProlog** , in: Meta-Programming in Logic Programming, eds. Abramson, H., and Rogers, M.H., The MIT Press, Cambridge, 1989, Chapter 22, pp:417-434.

Book Reviews in Refereed Journals:

1. Ilyas Cicekli, **"**Pierre M. Nugees. **An Introduction to Language Processing with Perl and Prolog.** Springer-Verlag. 2006**",** <u>Natural Language Engineering</u>, Vol. 16, No. 2, (2010), pp:193-195.

Edited Books:

1. Ilyas Cicekli, Nihan Cicekli, and Erol Gelenbe (editors), **Proceedings of the 17th International Symposium on Computer and Information Sciences (ISCIS 2002)**, Orlando, Florida, 2002, CRC Press.

2. Ilyas Cicekli, and H. Altay Güvenir (editors), **Proceedings of the 7th Turkish Symposium on Artificial Intelligence and Neural Networks (TAINN98)**, Ankara, Turkey, June 1998.

Refereed Proceedings:

1. Mustafa Çataltaş, Nurdan Akhan Baykan and Ilyas Cicekli, **Comparison of Textual Data Augmentation Methods on SST-2 Dataset**, in: Proceedings of 2nd International Congress of Electrical and Computer Engineering, Springer, 2024, pp. 189-202.

2. Seckin Sen and Ilyas Cicekli, **Weakly Supervised Relation Extraction**, in: Proceedings of Innovative Methods in Computer Science and Computational Applications in the Era of Industry 5.0 (ICAIAME 2023), Springer, 2024, pp. 100-112.

3. Ipek Nur Karaman, Ilyas Cicekli and Gonenc Ercan, **Automatic Term Extraction with Joint Multilingual Learning**, in: Proceedings of the 7th International Conference on Computer Science and Engineering (UBMK), 2022.

4. Anıl Özberk and Ilyas Cicekli, **Offensive Language Detection in Turkish Tweets with Bert Models**, in: Proceedings of the 6th International Conference on Computer Science and Engineering (UBMK), 2021, pp. 517-521.

5. Gulshat Kessikbayeva and Ilyas Cicekli, **Impact of Statistical Language Model on Example Based Machine Translation System between Kazakh and Turkish Languages**, in: Proceedings of the 4th International Conference on Natural Language Processing and Information Retrieval (NLPIR 2020) December 2020, Seoul, Korea, pp: 112–118.

6. Sinan Polat, Merve Selcuk-Simsek and Ilyas Cicekli, **A Modified Earley Parser for Huge Natural Language Grammars**, in: Proceedings of the 17th International Conference on Intelligent Text Processing and Computational Linguistics (CICLing '16), Konya, Turkey, 2016.

7. Nicat Suleymanov and Ilyas Cicekli, **Developing A Platform That Supplies Processed Information from Internet Resources and Services**, in: Proceedings of the 2nd International Conference on Soft Computing and Machine Intelligence (ISCMI 2015), November 2015, Hong Kong, pp: 116-120.

8. Servet Tasci and Ilyas Cicekli, **A Media Tracking and News Recommendation System**, in: Proceedings of the International Conference on Knowledge Discovery and Information Retrieval (KDIR 2014), October 2014, Rome, Italy, pp: 53-60.

9. Gulshat Kessikbayeva and Ilyas Cicekli, **Rule Based Morphological Analyzer of Kazakh Language**, in: Proceedings of the 2014 Joint Meeting of SIGMORPHON and SIGFSM (MORPHFSM 2014), June 2014, Baltimore, USA, pp:46-54.

10. Mucahid Kutlu and Ilyas Cicekli, **A Hybrid Morphological Disambiguation System for Turkish**, in: Proceedings of the 6th International Joint Conference on Natural Language Processing (IJCNLP 2013), October 2013, Nagoya, Japan.

11. Nagehan Pala Er and Ilyas Cicekli, **A Factoid Question Answering System Using Answer Pattern Matching**, in: Proceedings of the 6th International Joint Conference on Natural Language Processing (IJCNLP 2013), October 2013, Nagoya, Japan.

12. Gülşen Eryiğit, Fatih Samet Çetin, Meltem Yanık, Tanel Temel and Ilyas Cicekli, **TURKSENT: A Sentiment Annotation Tool for Social Media**, in: Proceedings of the 7th Linguistic Annotation Workshop and Interoperability with Discourse, ACL 2013, Sofia, Bulgaria, August 2013, pp: 131-134.

13. Filiz Alaca Aygul, Nihan Kesim Cicekli, and Ilyas Cicekli, **Natural Language Query Processing in Multimedia Ontologies**, in: Proceedings of International Conference on Knowledge Engineering and Ontology Development 2012 (KEOD 2012), Barcelona, Spain, October 2012.

14. Ibrahim Aygul, Nihan Cicekli, and Ilyas Cicekli, **Searching Documents with Semantically Related Keyphrases**, in: Proceedings of The Sixth International Conference on Advances in Semantic Processing (SEMAPRO 2012), Barcelona, Spain, September 2012.

15. Kezban Demirtas, Ilyas Cicekli, and Nihan Kesim Cicekli, **Summarization of Documentaries**, in: Proceedings of the 25th International Symposium on Computer and Information Sciences (ISCIS 2010), London, England, 2010.

16. Makbule Gulcin Ozsoy, Ilyas Cicekli, and Ferda Nur Alpaslan, **Text Summarization of Turkish Texts using Latent Semantic Analysis**, in: Proceedings of The 23rd International Conference on Computational Linguistics (COLING 2010), Beijing, China, 2010.

17. Ergin Soysal, Ilyas Cicekli, and Nazife Baykal, **Radyoloji Raporları için Türkçe Bilgi Çıkarım Sistemi**, in: Proceedings of VI. Ulusal Tıp Bilişimi Kongresi, Antalya, 2009. (in Turkish)

18. Celal Cığır, Mücahid Kutlu, and Ilyas Cicekli, **Generic Text Summarization for Turkish**, in: Proceedings of the 24rd International Symposium on Computer and Information Sciences (ISCIS 2009), Northern Cyprus, 2009.

19. Bahadır Özdemir, and Ilyas Cicekli, **Turkish Keyphrase Extraction Using Multi-Criterion Ranking**, in: Proceedings of the 24rd International Symposium on Computer and Information Sciences (ISCIS 2009), Northern Cyprus, 2009.

20. Fırat Kalaycılar, and Ilyas Cicekli, **TurKeyX: Turkish Keyphrase Extractor**, in: Proceedings of the 23rd International Symposium on Computer and Information Sciences (ISCIS 2008), Istanbul, Turkey, 2008.

21. Ziya Özkan Göktürk, Nihan Kesim Cicekli, and Ilyas Cicekli, **Metadata Extraction From Text In Soccer Domain**, in: Proceedings of the 23rd International Symposium on Computer and Information Sciences (ISCIS 2008), Istanbul, Turkey, 2008.

22. Serhan Tatar, and Ilyas Cicekli, **Using Bigram Language Model for Protein Name Recognition**, in: Proceedings of the Second International Workshop on Machine Learning in Systems Biology, Brussels, Belgium, 2008.

23. Nagehan Pala, and Ilyas Cicekli, **Turkish Keyphrase Extraction Using KEA**, in: Proceedings of the 22nd International Symposium on Computer and Information Sciences (ISCIS 2007), Ankara, Turkey, 2007.

24. Yasin Uzun, and Ilyas Cicekli, **Induction of Logical Relations Based on Specific Generalization of Strings**, in: Proceedings of the 22nd International Symposium on Computer and Information Sciences (ISCIS 2007), Ankara, Turkey, 2007.

25. Onur Aydın, Nihan Kesim Cicekli, Ilyas Cicekli, **Automated Web Services Composition with the Event Calculus**, in: Proceedings of the 8th International Workshop in "Engineering Societies in the Agents World" (ESAW07), Athens, Greece, 2007.

26. Ozlem Istek, Ilyas Cicekli, **A Link Grammar for an Agglutinative Language**, in: Proceedings of Recent Advances in Natural Language Processing (RANLP 2007), Borovets, Bulgaria, 2007, pp: 285-290.

27. Turhan Daybelge, Ilyas Cicekli, **A Rule-Based Morphological Disambiguator for Turkish**, in: Proceedings of Recent Advances in Natural Language Processing (RANLP 2007), Borovets, Bulgaria, 2007, pp: 145-149.

28. Onur Aydın, Nihan Kesim Cicekli, Ilyas Cicekli, **Towards Automated Web Service Composition with the Abductive Event Calculus**, in: Proceedings of Applications of Logic Programming in the Semantic Web and Semantic Web Services (ALPSWS 2006), Seattle, USA, 2006, pp:103-104.

29. Ilyas Cicekli**, Learning Translation Templates with Type Constraints,** in: Proceedings of Example-Based Machine Translation Workshop, MT Summit X, Phuket, Thailand, September 2005, pp:27-34.

30. Ilyas Cicekli, **Türkçe ve Kırım Tatarcası Arasında Bir Çeviri Sistemi**, in: Bilgisayar Destekli Dil Bilimi Çalıştayı Bildirileri, Ankara, Turkey, 2005, pp. 123-132 (in Turkish).

31. Guzen Erozel, Nihan Kesim, and Ilyas Cicekli, **Natural Language Interface on a Video Data Model**, in: Proceedings of DBA2005, Innsbruck, Austria, 2005, pp:198-203.

32. Funda Durupinar, Umut Kahramankaptan, and Ilyas Cicekli, **Intelligent Indexing, Querying and Reconstruction of Crime Scene Photographs,** in: Proceedings of TAINN2004, Izmir, Turkey, 2004, pp: 297-306 .

33. Kemal Altintas, and Ilyas Cicekli, **A Machine Translation System between a Pair of Closely Related Languages**, in: Proceedings of the 17th International Symposium on Computer and Information Sciences (ISCIS 2002), Orlando, Florida, 2002, CRC Press, pp:192-196.

34. Ilyas Cicekli, **A Specific Least General Generalization of Strings and Its Application to Example-Based Machine Translation**, in: Proceedings of the 10th Turkish Symposium on

Artificial Intelligence and Neural Networks (TAINN2001), North Cyprus, June 2001 , pp: 228-237.

35. Kemal Altintas, and Ilyas Cicekli, **A Morphological Analyser for Crimean Tatar**, in: Proceedings of the 10th Turkish Symposium on Artificial Intelligence and Neural Networks (TAINN2001), North Cyprus, June 2001, pp: 180-189.

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45. Dilek Zeynep Hakkani, Kemal Oflazer, and Ilyas Cicekli, **Tactical Generation in a Free Constituent Order Language**, in: Proceedings of the 8th International Workshop on Natural Language Generation (INLG96), Sussex, UK, June 1996, pp:81-91.

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47. Ilyas Cicekli, **Variable Ages in A WAM Based System**, in: Proceedings of the 4th Turkish Symposium on Artificial Intelligence and Neural Networks (TAINN95), Istanbul, Turkey, June 1995, pp:193-206.

48. Ilyas Cicekli, **Selecting Choice Points in An Intelligent Backtracking Schema**, in: Proceedings of the 9th International Symposium on Computer and Information Sciences (ISCIS-IX), Antalya, Turkey, November 1994, pp:615-623.

49. Ilyas Cicekli, **A Garbage Collector for the MetaProlog System (or: Collecting All the Garbage in Prolog Systems)**, in: Proceedings of the 1988 Annual Meeting of Northeast Artificial Intelligence Consortium, Blue Mountain Lake, NY, U.S.A., Aug.1988.

Ph.D. Dissertation

1. Ilyas Cicekli, **Design and Implementation of An Abstract MetaProlog Engine for MetaProlog**, Ph.D. Dissertation, Syracuse University, Syracuse, NY, USA, 1991.

My mostly cited articles according to Google Scholar on July 2024

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INVITED TALKS

1. Ilyas Cicekli, A plagiarism detection system based on part-of-speech (POS) tag n-grams and word embedding, The 6th International Conference on Computer Science and Engineering (UBMK 2020), September 2020.

2. Ilyas Cicekli, Computer Translation Systems, VI. Turkic World Economy, Language and Informatics Forum, Bishkek/Kyrgyzstan, November 2006. (in Turkish)

3. Ilyas Cicekli, Translation Systems, II. Computer Aided Linguistics Workshop, Istanbul, June 2006. (in Turkish)

4. Ilyas Cicekli, A Translation System Between Turkish and Crimean Tatar, Turkic World Economy, Language and Informatics Forum, Turkestan/Kazakhstan, October 2005. (in Turkish)

5. Ilyas Cicekli, A Translation System Between Turkish and Crimean Tatar, Computational Linguistics Workshop, Ankara, May 2005. (in Turkish)

GRADUATE STUDENT SUPERVISION

Supervised PhD Dissertations:

1. Mahmoud Hossein Zadeh, Ph.D., "Behavior Analysis in Social Media", June 2023
2. Kadir Yalcin, Ph.D., "A Plagiarism Detection System Based on Document Similarity", September 2022
3. Samira Karimi Mansoub, Ph.D., "Selective Personalization Using Topical User Profile to Improve Search Results", October 2020
4. Gulshat Kessikbayeva, Ph.D., "Example Based Machine Translation System Between Kazakh and Turkish Supported by Statistical Language Model", May 2016
5. Farhad Soleimanian Gharehchopogh, Ph.D., "Open Domain Factoid Question Answering System", September 2015
6. Gonenc Ercan, Ph.D., "Text Summarization", January 2012
7. Serhan Tatar, Ph.D., "Information Extraction in Turkish", January 2011
8. Ergin Soysal, Ph.D., "Ontology Based Information Extraction on Free Text Radiological Reports Using Natural Language Processing Approach", September 2010 (co-supervisor)

Supervised M.S. Theses:

1. Mustafa Cataltas, M.S., "Data Augmentation for Natural Language Processing", June 2024
2. Seckin Sen, M.S., "Weakly-Supervised Relation Extraction", September 2023
3. Omer Sahin, M.S., "Evaluating the Use of Neural Ranking Methods in Search Engines", January 2022
4. Anil Ozberk, M.S., "Offensive Language Detection on Turkish Tweets with Bert Models", January 2022
5. Sinan Polat, M.S., "Example-Based Machine Translation and Translation Memory System", November 2016
6. Merve Selcuk Simsek, M.S., "Example Based Machine Translation Between Turkish and Turkish Sign Language", July 2016
7. Nicat Suleymanov, M.S., "Developing A Platform That Supplies Processed Information from Internet Resources and Services", September 2015
8. Servet Tasci, M.S., "Content Based Media Tracking and News Recommendation System", January 2015
9. Mücahid Kutlu, M.S., "Turkish Noun Phrase Parsing", June 2010
10. Kezban Demirtaş, M.S., "Automatic Video Categorization and Summarization", September 2009 (co-supervisor).
11. Nagehan Pala Er, M.S., "Turkish Factoid Question Answering Using Answer Pattern Matching", August 2009
12. Özkan Göktürk, M.S., "Metadata Extraction From Text in Soccer Domain", September 2008 (co-supervisor).
13. Turhan Osman Daybelge, M.S., "Example Based Machine Translation", August 2007
14. Hande Dogan, M.S., "Example Based Machine Translation with Type Associated Translation Examples", January 2007
15. Yasin Uzun, M.S., "Induction of Logical Relations Based on Specific Generalization of Strings", January 2007

16. Gonenc Ercan, M.S., "Automated Text Summarization and Keyphrase Extraction", September 2006
17. Ozlem Istek, M.S., "A Link Grammar for Turkish", September 2006
18. Baris Eker, M.S., "Turkish Text to Speech System", April 2002
19. Goker Canitezer, M.S., "Generalization of Predicates with String Arguments", January 2002
20. Kemal Altintas, M.S., "Turkish to CrimeanTatar Machine Translation System", August 2001
21. Atacan Cundoroglu, M.S., "Error Tolerant Finite State Parsing for a Turkish Dialogue System", August 2001
22. Umut Topkara, M.S., "Prefix-Suffix Based Statistical Language Model for Turkish", August 2001
23. Ayse Pinar Saygin, M.S., "Turing Test and Conversation", August 1999
24. Zeynep Orhan, M.S., "Confidence Factor Assignment to Translation Templates", September 1998
25. Selman Murat Temizsoy, M.S., "Design and Implementation of a System for Mapping Text Meaning Representations to F-Structures of Turkish Sentences", August 1997
26. Dilek Zeynep Hakkani, M.S., "Design and Implementation of a Tactical Generator for Turkish, A Free Constituent Order Language", August 1996
27. Turgay Korkmaz, M.S., "Turkish Text Generation with Systemic-Functional Grammar", August 1996

PROFESSIONAL AWARDS

- Third Best Paper Award in 9th International Conference on Computational Linguistics and Intelligent Text Processing (CICLing2008) for the paper "Gonenc Ercan, and Ilyas Cicekli, Lexical Cohesion Based Topic Modeling for Summarization, Lecture Notes in Computer Science 4919, Springer Verlag, (2008), pp: 582-592".
- Scholarship for graduate study at abroad is awarded by the Educational Ministry of Turkey.
- Graduated as a second best student from Department of Computer Engineering of Middle East Technical University.
- Graduated as a high honor student from Department of Computer Engineering of Middle East Technical University.
- Scholarship for undergraduate study is awarded by TUBITAK (The Scientific and Technical Research Council of Turkey).

PROFESSIONAL DUTIES

The *program chairman* of the 17th International Symposium on Computer and Information Sciences (ISCIS XVII) which was held in Orlando, Florida, USA in October 2002.

The *program co-chairman* of the Seventh Turkish Symposium on Artificial Intelligence and Neural Networks (TAINN'98) which was held in Ankara, Turkey in June 1998.

The *program committee* membership of International Symposium on Computer and Information Sciences (ISCIS) conference series between 1993 and 2016.

- Natural Language Processing Technical Area Leader of ISCIS conference series between 2001 and 2016

The *program committee* member Example-Based Machine Translation Workshop 2005 (EBMT 2005)

The *program committee* member Example-Based Machine Translation Workshop 2003 (EBMT 2003)

The *program committee* membership of Turkish Symposium on Artificial Intelligence and Neural Networks (TAINN) conference series between 1992 and 2002.

The *referee* for journal papers and conference papers in various years, and some of them are:
- Artificial Intelligence Journal
- IEEE Data and Knowledge Engineering
- Information Processing & Management
- Journal of Machine Translation
- The Computer Journal
- Journal of Logic Programming
- Information Sciences Journal
- Journal of Information Sciences
- Bioinformatics Journal
- Turkish Journal of Electrical Engineering & Computer Sciences
- COLING 2014
- Association of Computational Linguistics (ACL 2007)
- European Association of Computational Linguistics (EACL 2006)

The *member* of "Computational Linguistics Group at Turkish Language Society"

MEMBERSHIP

ACM (Association for Computing Machinery)

ACL (The Association for Computational Linguistics)

AMTA (Association for Machine Translation in the Americas)

EAMT (European Association for Machine Translation)