

CURRICULUM VITAE

KEMAL OFLAZER

A) PERSONAL DATA

Birth date and place: September 19, 1955, Kayseri, Turkey
Address: Faculty of Engineering and Natural Sciences, Sabancı University,
Orhanlı 81474, Tuzla, İstanbul, Turkey
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B) **CURRENT POSITION** : Professor of Computer Science and Engineering, Sabancı University

C) ACADEMIC DEGREES

Ph.D., Computer Science	Carnegie Mellon University, Pittsburgh, PA, USA	1987
M.Sc., Computer Engineering	Middle East Technical University, Ankara, Turkey	1979
B.Sc., Electrical Engineering	Middle East Technical University, Ankara, Turkey	1978

D) EMPLOYMENT HISTORY

9/2000 – Present	Faculty of Engineering and Natural Sciences, Sabancı University Orhanlı, 81474, Tuzla, İstanbul, Turkey
9/1989 – 8/2000	Department of Computer Engineering, Bilkent University Bilkent, 06533, Ankara, Turkey
2/1986 – 7/1989	Formative Technologies, Senior Scientist Pittsburgh, PA, 15227, USA

E) VISITING POSITIONS

7/2002 – 8/2002	Department of Linguistics, University of California, Berkeley (Visiting Scientist) Berkeley, CA, USA (Host: Prof. Sharon Inkelaar)
9/1998 – 8/1999	Computing Research Laboratory, NMSU (Visiting Scientist) Las Cruces, NM, 81103, USA (Host: Prof. Sergei Nirenburg)
7/1997 – 9/1997	Xerox Research Centre Europe, (Visiting Scientist) Grenoble, France (Host: Dr. Lauri Karttunen)

F) AWARDS

- TÜBİTAK (Turkish NSF)/NATO Ph.D. scholarship during studies in U.S.A. (1980-1981, Honorary Scholarship thereafter.)

G) SCHOLARLY and PROFESSIONAL DUTIES

- *Member of the Editorial Board*, Journal of Artificial Intelligence Research, Morgan Kaufmann Publishers, 2004 through 2006.
- *Member of the Editorial Board*, Computational Linguistics Journal, MIT Press, 2002 through 2004
- *Member of the Editorial Board*, Machine Translation Journal, Kluwer Academic Publishers, 1996 –
- *Member of the Advisory Board*, Natural Language Processing Book Series, John Benjamins Publishers. 1999 –
- *Guest Editor*, Special Issue on Finite State Resources and Language Processing, Machine Translation Journal, Volume 18, No:3 (jointly with Ken Beesley, Lauri Karttunen and Eric Laporte)
- *Guest Editor*, Special Issue on Finite State Methods in Natural Language Processing, Computational Linguistics, Vol. 26, No:1, 2000, (jointly with Lauri Karttunen)
- *Guest Editorial Board Member*, Special Issue on Parallel Texts, Journal of Natural Language Engineering, 2005.
- *Reviewer*, Natural Language Engineering, Cambridge University Press
- *Reviewer*, Speech Communication, Elsevier
- *Reviewer*, IEEE Transactions on Pattern Analysis and Machine Intelligence, IEEE Press.
- *Reviewer*, Journal on Research in Language and Computation (JRLAC)
- *Reviewer*, Journal of Artificial Intelligence Research (JAIR)
- *Program Committee Member*, ICCPOL 2006, The 21st International Conference on Computer Processing of Oriental Languages, December 2006, Singapore.
- *Program Committee Member*, SIGPHON-06 Eighth Meeting of the ACL Special Interest Group in Computational Phonology, HLT-NAACL-2006, New York City, USA.
- *Program Subcommittee Member for Morphology, Phonology and Finite State Methods*, COLING/ACL2006 - Joint conference of the International Committee on Computational Linguistics and the Association for Computational Linguistics, Sydney, Australia, 2006.
- *Program Subcommittee Member for Parsing*, EMNLP 2006 - 2006 Conference on Empirical Methods in Natural Language Processing, Sydney, Australia, 2006.
- *Tutorials Co-Chair*, EACL 2006, Conference of the European Chapter of the Association for Computational Linguistics, April 2006, Trento, Italy.
- *Program Committee Co-Chair*, ACL 2005, 43rd Annual Meeting of the Association for Computational Linguistics, June 2005
- *Program and Steering Committee Member*, FSMNLP 2005, Finite-State Methods and Natural Language Processing, September 2005, Helsinki, Finland
- *Reviewer*, EAMT-2005 10th Annual Conference of the European Association for Machine Translation, May 2005, Budapest, Hungary
- *Program Committee Member*, ISCIS 2005, The 20th International Symposium on Computer and Information Sciences, Antalya, Turkey, October 2005
- *Program Committee Member*, RANLP 2005, Recent Advances in Natural Language Processing, Borovetz, Bulgaria, September 2005

- *Program Committee Member*, Semantic Web Technologies for Machine Translation Satellite Workshop at the MT Summit, Phuket, Thailand, September 2005
- *Program Committee Member*, EMNLP 2004, ACL/SIGDAT Conference On Empirical Methods in Natural Language Processing, 2004.
- *Program Committee Member and Chair of Finite State Methods Subcommittee*, ACL 2004, 42nd Annual Meeting of the Association for Computational Linguistics, July 2004
- *Program Committee Member - Demo and Poster Track*, ACL 2004, 42nd Annual Meeting of the Association for Computational Linguistics, July 2004
- *Program Committee Member* ACL 2004 Sigphion Workshop, July 2004
- *Program Committee Member*, ISCIS 2004, The 19th International Symposium on Computer and Information Sciences, Antalya, Turkey, October 2004
- *Reviewer*, IJCNLP-04, 1st International Joint Conference on Natural Language, Processing, March 2004
- *Program Committee Member*, Second Workshop on Treebanks and Linguistic Theory, Vaxjo, Sweden, 14-15 November 2003.
- *Program Committee Member*, Conference on Recent Advances in NLP Borovetz, Bulgaria, 10-12 September 2003.
- *Program Committee Member*, Workshop on Information Extraction for Slavonic and other Central and Eastern European Language, Borovetz, Bulgaria, 8-9 September 2003.
- *Program Committee Member*, Workshop on Shallow Processing of Large Corpora at Corpus Linguistics Conference in Lancaster UK, on March 27, 2003
- *Organization and Program Committee Member*, Workshop on Finite-State Methods in Natural Language Processing, held at EACL 2003, The Conference of the European Chapter of the Association for Computational Linguistics, April 2003, Budapest, Hungary
- *Program Committee Member and Chair of Finite State Methods and Morphology Subcommittee*, EACL 2003, The Conference of the European Chapter of the Association for Computational Linguistics, April 2003, Budapest, Hungary
- *Program Committee Member*, Student Workshop at EACL 2003, The Conference of the European Chapter of the Association for Computational Linguistics, April 2003, Budapest, Hungary
- *Program Committee Member*, HLT-NAACL 2003 Workshop on Building and Using Parallel Texts: Data Driven Machine Translation and Beyond, May 31, 2003, Edmonton, Canada.
- *Program Subcommittee Member*, Syntax and Morphology Subcommittee, ACL 2003, the Conference of the Association for Computational Linguistics, Sapporo, Japan, July 2003
- *Program Subcommittee Member for Learning Approaches*, the 19th International Conference on Computational Linguistics, COLING 2002, Taiwan, August 2002.
- *Program Committee Member*, Workshop on Treebanks and Linguistic Theory, Part of the summer school on Empirical Linguistics and Natural Language Processing in Sozopol Bulgaria, Sept. 2002.
- *Program Committee Member*, Workshop on Wordnet Structures and Standardization and how these affect Wordnet Applications and Evaluation, held in conjunction with the Third Language Resources and Evaluation Conference (LREC 2002) in Las Palmas, Spain, in May 2002.
- *Program Committee Member*, ICCPOL 2001, International Conference on Computer Processing of Oriental Languages, Seoul Korea, 2001

- *Program Committee Member*, RANLP 2001, Recent Advances in Natural Language Processing, Tzigris Chark, Bulgaria, September 2001
- *Program Committee Member*, ACL/EACL 2001, 39th Annual Meeting of the Association for Computational Linguistics, Toulouse, France, July 2001
- *Program Committee Member*, ACL 2000, 38th Annual Meeting of the Association for Computational Linguistics, Hong Kong, October 2000
- *Chair*, NATO Advanced Study Institute on Language Engineering for Lesser-studied Languages, Ankara, Turkey, July 2000
- *Book Reviewer*, Cambridge University Press, 1999
- *Morphology and Phonology Program Subcommittee Chair*, COLING 2000, International Conference on Computational Linguistics, August 2000
- *Program Committee Member*, EACL'99, Ninth Conference of the European Chapter of the Association for Computational Linguistics, Bergen, Norway, June 1999
- *Program Committee Member*, ACL'99, 37th Annual Meeting of the Association for Computational Linguistics, College Park, MD, USA, July 1999
- *Member of the Board* (Nominating Committee), European Chapter of the Association for Computational Linguistics (EACL), 1999 – 2002
- *Program Committee Member*, ISCIS XIII, The 13th International Symposium on Computer and Information Sciences, Antalya, Turkey, October 1998
- *Program Committee Member*, Third ACL/SIGDAT Conference On Empirical Methods in Natural Language Processing (EMNLP-3), Granada, Spain, 1998
- *Program Committee Member for the Linguistic Resources & Computational Methods Program Subcommittee*, COLING'98/ACL'98 International Conference on Computational Linguistics, Montreal, Canada, August 1998
- *Program Committee Member for the Morphology and Phonology Subcommittee*, COLING'98/ACL'98 International Conference on Computational Linguistics, Montreal, Canada, August 1998
- *Co-organizer and Program Committee Co-chair*, FSMNLP'98, ACL Workshop on Finite State Methods in Natural Language Processing, Ankara, Turkey, June 1998
- *Program Committee Member*, 7th Turkish Symposium on Artificial Intelligence and Artificial Neural Networks, Ankara, Turkey, June 1998
- *Program Committee Member*, NeMLaP-3, International Conference on New Methods in Language Processing, Sydney, Australia, January 1998
- *Program Committee Member*, Second ACL/SIGDAT Conference On Empirical Methods in Natural Language Processing (EMNLP-2), Providence, RI, USA, June 1997
- *Program Committee Member*, ACL/EACL'97, 35th Annual Meeting of the Association for Computational Linguistics and the Eighth Conference of the European Chapter of the Association for Computational Linguistics, Madrid, Spain, July 1997
- *Program Committee Member*, 6th Turkish Symposium on Artificial Intelligence and Artificial Neural Networks, Başkent University, Ankara, Turkey, June 1997
- *Program Committee Co-chair and Organizing Committee Chair*, NeMLaP-2, International Conference on New Methods on Language Processing, Ankara, Turkey, September 1996
- *Program Committee Member for the Morphology Program Subcommittee*, COLING'96, International Conference on Computational Linguistics, Copenhagen, Denmark, August 1996

- *Program Committee Member*, 5th Turkish Symposium on Artificial Intelligence and Artificial Neural Networks, İTÜ, İstanbul, Turkey, June 1996
- *Program Committee Co-chair*, 4th Turkish Symposium on Artificial Intelligence and Artificial Neural Networks, TÜBİTAK Marmara Research Center, Gebze, Turkey, June 1995
- *Program Committee Co-chair*, 3rd Turkish Symposium on Artificial Intelligence and Artificial Neural Networks, Middle East Technical University, Ankara, Turkey, June 1994
- *Program Committee Member*, 2nd Turkish Symposium on Artificial Intelligence and Artificial Neural Networks, Middle East Technical University, Ankara, Turkey, June 1993
- *General and Founding Chair*, 1st Turkish Symposium on Artificial Intelligence and Artificial Neural Networks, Bilkent University, Ankara, Turkey, June 1992
- *Program Committee Member*, ISCIS VII, Seventh International Symposium on Computer and Information Sciences, Antalya, Turkey, October 1992
- *Organizing Committee and Program Committee Member*, ISCIS VI, Sixth International Symposium on Computer and Information Sciences Antalya, Turkey, October 1991
- *Program Committee Member*, ISCIS V, Fifth International Symposium on Computer and Information Sciences, Göreme, Nevşehir, Turkey, October 1990

H) MEMBERSHIP

- Association for Computational Linguistics (ACL)

I) INVITED TALKS

- *Turkish Natural Language Processing – History and the State-of-the-art*, Department of Linguistics, University of Uppsala, Sweden, May 2006
- *The Architecture and the Implementation of a Pronunciation Lexicon for Turkish*, Department of Linguistics, University of Uppsala, Sweden, May 2006
- *The Architecture and the Implementation of a Pronunciation Lexicon for Turkish* International Computer Science Institute (ICSI), Berkeley, CA, March 2006.
- *A Pronunciation Lexicon for Turkish based on Two-level Morphology*, Istanbul Technical University, September 2003
- *A Pronunciation Lexicon for Turkish based on Two-level Morphology*, Middle East Technical University, April 2003
- *A Pronunciation Lexicon for Turkish based on Two-level Morphology*, AT&T Research Lab, Florham Park, NJ, USA, August 6, 2003
- *A Finite State Pronunciation Lexicon for Turkish*, Xerox Research Centre Europe, Grenoble, France, February 5, 2003
- *Bootstrapping Morphological Analyzers by Combining Human Elicitation and Machine Learning*, Conference on Recent Advances in Natural Language Processing, Izgov Chark, Bulgaria, September, 6, 2001
- *Two-level Morphology and Finite State Methods: A Consumer's View*, Invited Talk at the Special Event *Twenty Years of Two-Level Morphology Panel*, held during European Summer School on Logic Language and Computation (ESSLLI), August 22, 2001 (Other panelists included Lauri Karttunen (Xerox PARC), Kimmo Koskenniemi (University of Helsinki), Ken Beesley (XRCE Research Lab Grenoble))

- *Bootstrapping Morphological Analyzers by Combining Human Elicitation and Machine Learning*, Department of Computer Science, University of the Basque Country, San Sebastian, Spain, July 13, 2001
- *Dependency Parsing with an Extended Finite State Approach*, Department of Computer Science, University of the Basque Country, San Sebastian, Spain, July 12, 2001
- *Building a Turkish Treebank*, Department of Computer Science, University of the Basque Country, San Sebastian, Spain, July 12, 2001
- *Bootstrapping Morphological Analyzers by Combining Human Elicitation and Machine Learning*, Phonology Laboratory, University of California at Berkeley, USA, January 24, 2001
- *Natural Language Processing*, Academic Informatics Conference, Invited Talk at the Opening Ceremony, Süleyman Demirel University, Isparta, Turkey, February 10, 2000
- *Statistical Morphological Disambiguation for Agglutinative Languages*, New Mexico State University, Computing Research Lab, Las Cruces, NM, USA, January 13, 2000
- *Implementing a Turkish Morphological Analyzer with Xerox Finite State Tools*, New Mexico State University, Computing Research Lab, Las Cruces, NM, USA, February 24, 1998.
- *Morphological Disambiguation of Turkish Using Voting Constraints*, New Mexico State University, Computing Research Lab, Las Cruces, NM, USA, February 25, 1998.
- *Morphological Disambiguation and Tagging by Voting Constraints*, Johns Hopkins University, Center for Language and Speech Processing, Baltimore MD, USA, March 31, 1997
- *Two-level Morphological Description of Turkish and Morphological Disambiguation of Turkish Text*, Cambridge University, Computer Laboratory, Cambridge, England, June 19, 1995
- *Two-level Specification of Turkish Morphology*, Rank Xerox Research Centre, Grenoble, France, October 12, 1994
- *Tagging and Morphological Disambiguation of Turkish Text*, Rank Xerox Research Centre, Grenoble, France, October 11, 1994
- *Highly Parallel Execution of Production Systems: A Model, Algorithms and Architecture*, METU Regional Seminar on Expert Systems and their Microcomputer Applications, Ankara, May 1991

J) TEACHING

a) GRADUATE COURSES

- CS 513 *Topics in Natural Language Processing* (Sabancı University)
- CS 580 *Special Topics in Computer Science: Readings in Natural Language Processing and Bioinformatics* (Sabancı University, along with Uğur Sezerman)
- CS 532 *Database Systems* (Bilkent University)
- CS 528 *Parallel Processing for Non-numeric Applications* (Bilkent University)
- CS 552 *Neurocomputing and Connectionist Modeling* (Bilkent University)
- CS 556 *Readings in Machine Learning and Natural Language Processing* (Bilkent University)
- CS 578 *Natural Language Processing* (Bilkent University)
- CS 580 *Advanced Finite State Techniques in Language Processing* (Bilkent University)

b) UNDERGRADUATE COURSES

- CS 202 *Data Structures* (Sabancı University)
- CS 301 *Formal Languages and Automata Theory* (Sabancı University)
- CS 201 *Fundamental Structures of Computer Science I* (Bilkent University)
- CS 202 *Fundamental Structures of Computer Science II* (Bilkent University)
- CS 280 *Combinatorics and Graph Theory* (Bilkent University)
- CS 423 *Computer Architecture* (Bilkent University)
- CS 454 *Software Engineering* (Bilkent University)
- CS 281 *Computers and Data Organization* (Bilkent University)

c) OTHERS

- Computational Morphology, Foundational Course to be delivered at the European Summer School on Logic, Language and Information in Malaga, Spain, August 2006.
- Computational Morphology, Tutorial given at the Workshop on Finite State Methods in Natural Language Processing, EACL 2003, Budapest, Hungary, April 12, 2003.
- Finite State Methods in Natural Language Processing, Tutorial given at Conference on Recent Advances in Natural Language Processing, Tzigov Chark, Bulgaria, September 2001
- Computational Morphology, NATO Advanced Study Institute on Language Engineering for Lesser-studied Languages, July 2000
- Computational Morphology, NMSU-Computer Research Laboratory Summer School of Language Engineering, July 1999

K) UNIVERSITY SERVICE

- Member of the University Ethics Board (2005 –)
- Member of the Faculty Curriculum Committee (2003 – 2005)
- Member of the Faculty Recruitment Committee (2003 –)
- Member of the University Promotion Committee (2001 –)

L) GRADUATE STUDENT SUPERVISION

- Oğuzhan Külekçi, *Statistical Morphological Disambiguation with Application to Disambiguation of Pronunciation in Turkish*, Ph.D., 9/01 - 2/06.
- Yasin Yılmaz, *Vi-XFST; A Visual Interface for Xerox Finite-state Toolkit*, M.Sc., 9/01 - 7/03
- İlknur Durgar, *Retrieving Words from Their Meanings*, M.Sc., 9/01 - 7/03.
- Esra Vural, *A Prosodic Turkish Text-To-Speech Synthesizer*, M.Sc., 9/01 - 7/03
- Aydın Akyol, *Filler Model Based Word Level Confidence Measures for Spoken Dialogue Systems*, M.Sc., 9/01 - 7/03, (Co-advisor)
- Dilek Zeynep Hakkani-Tür, *Statistical Language Modeling for Turkish*, Ph.D., 9/96 – 8/00 (Currently Member of Technical Staff at International Computer Science Institute, UC Berkeley, USA)
- Gökhan Tür, *A Statistical Information Extraction System for Turkish*, Ph.D., 9/96 – 8/00 (Currently Member of Technical Staff at SRI International, USA)

- Cemal Yılmaz, *A Large Vocabulary Speech Recognition System for Turkish*, M.Sc., 9/97 – 7/99 (Co-advisor)
- Kurtuluş Yorulmaz, *Design for a Computational Lexicon for Turkish Natural Language Processing Applications*, M.Sc., 10/94 – 2/1997
- Dilek Zeynep Hakkani, *A Unification-based Generator for Turkish Sentences*, M.Sc., 5/95 – 7/96
- Gökhan Tür, *Transformation-based Unsupervised Learning of Rules for Morphological Disambiguation*, M.Sc., 10/94 – 7/97
- Okan Yılmaz, *Design and implementation of a verb lexicon and a verb sense disambiguator for Turkish*, M.Sc., 10/92 – 9/94.
- İlker Kuruöz, *Tagging and Morphological Disambiguation of Turkish Text*, M.Sc., 10/92 – 7/94.
- Coşkun Demir, *An ATN Grammar for Turkish*, M.Sc., 10/91 – 7/93.
- Zelal Güngördü, *A Lexical-Functional Grammar for Turkish*, M.S., 10/91 – 7/93, (Awarded Outstanding Work by a Young Informatics Researcher award by Turkish Informatics Society, 1994).
- Gürhan Keskin, *Design and Implementation of a Radiological Image Viewing Tool*, M.S., 10/91 – 6/93.
- Cem Yüceer, *A General Purpose, Rotation, Scaling and Translation Invariant Pattern Recognition System*, 1/90 – 1/92
- Aydın Solak, *Design and Implementation of a Spelling Checker for Turkish*, 10/89 – 5/91.
- Deniz Ercoşkun, *Parallel Implementation of the Backpropagation Learning Algorithm on a Hypercube Parallel Processor*, 10/89 – 12/90.

M) SCHOLARLY PUBLICATIONS

a) PH.D. THESIS

- *Partitioning in Parallel Processing of Production Systems*, February 1987, Computer Science Department, Carnegie Mellon University, Pittsburgh, PA, USA, Advisor: Prof. H. T. Kung.

b) M.Sc. THESIS

- *Microprocessor Based Approach to RAP Database Machine Cell Structure - Design and Analysis*, Department of Computer Engineering, Middle East Technical University, Ankara, Turkey, 1979, Advisor: Prof. Esen A. Özkarahan.

c) EDITED BOOKS, ANTHOLOGIES, BIBLIOGRAPHIES

- 1) *Proceedings of the 43rd Annual Meeting of the Association for Computational Linguistics-ACL'05*, 2005, Association for Computational Linguistics, Ann Arbor Michigan, (jointly with Hwee-Tou Ng)
- 2) *Special Issue on Finite State Resources and Language Processing*, Machine Translation Journal, Volume 18: No 13, 2003 (but appears in 2004) (jointly with Ken Beesley, Lauri Karttunen and Eric Laporte)

- 3) *Language Engineering for lesser-studied Languages*, Proceedings of the NATO ASI, Summer 2003, IOS Press
- 4) *Proceedings of the Workshop on Finite State Methods in Natural Language Processing* held during EACL - 2003, Budapest, Hungary, April 2003 (jointly with Ken Beesley, Lauri Karttunen and Eric Laporte)
- 5) *Special Issue on Finite State Methods in Natural Language Processing*, Computational Linguistics, Vol. 26, No:1, 2000, (jointly with Lauri Karttunen)
- 6) *Proceedings of the International Workshop on Finite State Methods in Natural Language Processing*, June 1998 (jointly with Lauri Karttunen)
- 7) *Proceedings of the Second International Conference on New Methods in Language Processing*, September 1996 (jointly with Harold Somers)
- 8) *Proceedings of the 4th Turkish Symposium on Artificial Intelligence and Artificial Neural Networks*, June 1995 (jointly with Halil A. Güvenir, Varol Akman, Şakir Kocabaş)
- 9) *Proceedings of the 3rd Turkish Symposium on Artificial Intelligence and Artificial Neural Networks*, June 1994 (jointly with Cem Bozşahin, Uğur Halıcı)
- 10) *Proceedings of the 1st Turkish Symposium on Artificial Intelligence and Artificial Neural Networks*, June 1992 (jointly with Halil A. Güvenir, Varol Akman, Uğur Halıcı.)

d) CHAPTERS IN BOOKS OR MONOGRAPHS

- 1) *Computational Morphology*, in **Encyclopedia of Cognitive Science**, McMillan Reference Ltd. 2003 (**Kemal Oflazer**)
- 2) *Design for a Turkish Treebank*, Invited chapter in **Treebanks: Building and exploiting syntactically annotated corpora**, Anne Abeille, Editor, Kluwer Academic Publishers, in 2003 (**Kemal Oflazer**, Bilge Say, Dilek Zeynep Hakkani-Tür, Gökhan Tür)
- 3) *Morphological Analysis*, Invited chapter in **Syntactic Wordclass Tagging**, Hans van Halteren, Editor, Kluwer Academic Publishers, 1999 (**Kemal Oflazer**)

e) ARTICLES IN REFEREED JOURNALS

- 1) *The Architecture and the Implementation of a Finite State Pronunciation Lexicon for Turkish*, **Computer Speech and Language**, Vol:20, No: 1, 2006, (**Kemal Oflazer** and Sharon Inkelas)
- 2) *Building a Wordnet for Turkish*, **Romanian Journal of Information Science and Technology**, Volume 7, Numbers 1-2, 2004, 163–172 (Orhan Bilgin, Özlem Çetinoğlu, **Kemal Oflazer**)
- 3) *A Statistical Information Extraction System for Turkish*, **Journal of Natural Language Engineering**, Volume 9, No:2, 2003, (Gökhan Tür, Dilek Zeynep Hakkani-Tür, **Kemal Oflazer**)
- 4) *Lenient Morphological Analysis*, **Journal of Natural Language Engineering**, Volume 9, No:1, 2003 (**Kemal Oflazer**)
- 5) *Dependency Parsing with an Extended Finite State Approach*, **Computational Linguistics**, Volume 29, No:4, 2003 (**Kemal Oflazer**)
- 6) *Statistical Morphological Disambiguation for Agglutinative Languages*, **Computers and the Humanities**, Volume 36 No. 4, 2002 (Dilek Zeynep Hakkani-Tür, **Kemal Oflazer**, Gökhan Tür)
- 7) *Bootstrapping Morphological Analyzers by Combining Human Elicitation and Machine Learning*, **Computational Linguistics**, Vol: 27, No:1, 2001, (**Kemal Oflazer**, Sergei Nirenburg, Marjorie McSchane)

- 8) *Introduction to the special issue on finite-state methods in NLP*, Computational Linguistics, Vol. 26, No:1, 2000, (Lauri Karttunen and **Kemal Oflazer**)
 - 9) *Tactical Generation in Free Constituent Order Language*, **Journal of Natural Language Engineering**, Vol: 4 No: 2, 1998, (Dilek Zeynep Hakkani, **Kemal Oflazer**)
 - 10) *Error-tolerant Retrieval of Trees*, **IEEE Transactions for Pattern Analysis and Machine Intelligence**, Vol: 19, No:12, 1997, (**Kemal Oflazer**)
 - 11) *Error-tolerant Finite State Recognition with Applications to Morphological Analysis and Spelling Correction*, **Computational Linguistics**, Vol: 22, No:1, 1996. (**Kemal Oflazer**)
 - 12) *Parsing Turkish with the Lexical Functional Grammar Formalism*, **Journal of Machine Translation**, Vol:10, No:4, 1995. (Zelal Güngördü, **Kemal Oflazer**)
 - 13) *Two-level Description of Turkish Morphology*, **Literary and Linguistic Computing**, Vol: 9, No:2, 1994, (**Kemal Oflazer**)
 - 14) *Design and Implementation of a Spelling Checker for Turkish*, **Literary and Linguistic Computing**, Vol: 8, No:3, 1993, (Ayşın Solak, **Kemal Oflazer**)
 - 15) *A Rotation, Scaling and Translation Invariant Pattern Classification System*, **Pattern Recognition**, Vol: 26, No:5, 1993, (Cem Yüceer, **Kemal Oflazer**)
 - 16) *Solving Tangram Puzzles: A Connectionist Approach*, **International Journal on Intelligent Systems**, Vol: 8, No:5, 1993. (**Kemal Oflazer**)
 - 17) *Highly Parallel Execution of Production Systems: A Model, Algorithms and Architecture*, **New Generation Computing**, Vol: 10 No:3, 1992. (**Kemal Oflazer**)
 - 18) *Design and Implementation of Single-Chip Median Filter*, **IEEE Transactions on Acoustics, Speech and Signal Processing**, Vol: ASSP-31, No:5, 1983. (**Kemal Oflazer**)
- f) PAPERS SUBMITTED TO REFEREED JOURNALS
- g) ARTICLES IN NON-REFEREED OR GENERAL JOURNALS
- 1) *Doğal Dil İşleme, (Natural Language Processing)*, **Popüler Bilim (Popular Science)**, September 1997, (**Kemal Oflazer**)
 - 2) *Türkçe Doğal Dil İşleme (Turkish Natural Language Processing)*, **Byte (Turkey)**, Vol: 1 No: 1, February, 1994, (**Kemal Oflazer**)
- h) REFEREED CONFERENCE PROCEEDINGS
- 1) *Morphology-Syntax Interface for Turkish LFG* in Proceedings of COLING/ACL2006 - Joint conference of the International Committee on Computational Linguistics and the Association for Computational Linguistics, Sydney, Australia, 2006. (Özlem, Çetinoğlu, **Kemal Oflazer**)
 - 2) *Initial Explorations in English to Turkish Statistical Machine Translation*, in Proceedings of NAACL 2006 Workshop on Statistical Machine Translation, New York, NY, June 2006, (İlknur Durgar-El-Kahlout, **Kemal Oflazer**)
 - 3) *Statistical Dependency Parsing for Turkish*, in Proceedings of EACL 2006 - The 11th Conference of the European Chapter of the Association for Computational Linguistics, April 2006, Trento, Italy (Gülşen Eryiğit, **Kemal Oflazer**)
 - 4) *Incorporating language constraints in sub-word based speech recognition*, in Proceedings of ASRU 2005 - 2005 IEEE Automatic Speech Recognition and Understanding Workshop, November 2005, Cancun, Mexico (Osman Büyük, Hakan Erdoğan, **Kemal Oflazer**)
 - 5) *Aligning Turkish and English Parallel Texts for Statistical Machine Translation*, in Lecture Notes in Computer Science, Vol:3733 – Proceedings ISCIS'05, October 2005, Istanbul, Turkey. (İlknur Durgar-El-Kahlout, **Kemal Oflazer**)

- 6) *Pronunciation Disambiguation in Turkish*. To appear in Lecture Notes in Computer Science, Vol:3733 – Proceedings ISCIS’05, October 2005, Istanbul, Turkey. (Oğuzhan Külekçi, **Kemal Oflazer**)
- 7) *Using Finite State Technology in a Tool for Linguistic Exploration* in Proceedings of FSMNLP-2005, Lecture Notes in Artificial Intelligence, Helsinki, Finland September 2005 (**Kemal Oflazer**, Mehmet Dinçer Erbaş, Müge Erdoğan)
- 8) *Konuşma Tanımada Karma Dil Birimleri Kullanımı Ve Dil Kısıtlarının Gerçeklenmesi*, in Proceedings of SIU - 2005, IEEE 13.th Signal Processing and Communication Applications Conference, Kayseri, Turkey, May 2005. (Osman Büyük, Hakan Erdoğan, **Kemal Oflazer**)
- 9) *An Online Handwriting Recognition System For Turkish* in Proceedings of SPIE Vol. #5676 Electronic Imaging 2005, San Jose, Jan. 2005 (Esra Vural, Hakan Erdoğan, **Kemal Oflazer**, Berrin Yanıkoglu)
- 10) *Developing Finite State NLP Systems with a Graphical Environment*, in Lecture Notes in Computer Science Vol. 3280 – Proceedings ISCIS’04, October 2004, Antalya, Turkey. (**Kemal Oflazer**, Yasin Yılmaz)
- 11) *A Preprocessor for Turkish Text Analysis*, in Lecture Notes in Computer Science Vol. 3280 – Proceedings ISCIS’04, October 2004, Antalya, Turkey. (**Kemal Oflazer**, Özlem Çetinoğlu, Orhan Bilgin and Bilge Say)
- 12) *SmartReader: An NLP-based Interactive Reading Application for Language Learning*, in Lecture Notes in Computer Science Vol. 3280– Proceedings ISCIS’04, October 2004, Antalya, Turkey (**Kemal Oflazer** and Pınar Dönmez)
- 13) *Integrating Morphology with Multi-word Expression Processing in Turkish*, in Proceedings of the ACL 2004 Workshop on Multiword Expressions: Integrating Processing, July 2004, Barcelona, Spain, (**Kemal Oflazer**, Özlem Çetinoğlu, Bilge Say)
- 14) *Vi-xfst: A Visual Regular Expression Development Environment for Xerox Finite State Tool*, in Proceedings of the ACL 2004 Sigphon Workshop, July 2004, Barcelona, Spain (**Kemal Oflazer**, Yasin Yılmaz)
- 15) *Yazıdan Konuşma Üretmede Kullanılan Doğal Dil İşleme Tekniklerine Genel Bir Bakış (An Overview of Natural Language Processing Techniques in Text-To-Speech Systems)*, in Proceedings of SIU - 2004, IEEE 12.th Signal Processing and Communication Applications Conference, Kuşadası, Turkey, April 2004. (M. Oğuzhan Külekçi, **Kemal Oflazer**)
- 16) *Türkçe İçin Bürünsel Yazıdan Konuşma Üretme (A Prosodic Turkish Text-to-Speech Synthesizer)*, in Proceedings of SIU - 2004, IEEE 12.th Signal Processing and Communication Applications Conference, Kuşadası, Turkey, April 2004, (Esra Vural, **Kemal Oflazer**)
- 17) *Türkçe İçin Tablet PC Ortamında Çevrimiçi Yazı Tanıma Sistemi (An Online Handwriting Recognition System For Turkish)* , in Proceedings of SIU - 2004, IEEE 12.th Signal Processing and Communication Applications Conference, Kuşadası, Turkey, April 2004, (Esra Vural, Hakan Erdoğan, **Kemal Oflazer**, Berrin Yanıkoglu)
- 18) *Use of WordNet for Retrieving Words from Their Meanings* in Proceedings of the Global WordNet Conference, Masaryk, Czech Republic, January 2004 (İlknur Durgar-El-Kahlout, **Kemal Oflazer**)
- 19) *Morphosemantic Relations In and Across Wordnets: A Preliminary Study Based on Turkish*, in Proceedings of the Global WordNet Conference, Masaryk, Czech Republic, January 2004 (Orhan Bilgin, Özlem Çetinoğlu, **Kemal Oflazer**)
- 20) *A Pronunciation Lexicon for Turkish Based on Two-Level Morphology*, in Proceedings of Eurospeech Sept. 1-4, Geneva, Switzerland (**Kemal Oflazer**, Sharon Inkelas)

- 21) *A Finite State Pronunciation Lexicon for Turkish*, in the Proceedings of the EACL Workshop on Finite State Methods in NLP, April 13-14, 2003, Budapest, Hungary (**Kemal Oflazer**, Sharon Inkelas)
- 22) *The Annotation Process in the Turkish Treebank*, in the Proceedings of the EACL Workshop on Linguistically Interpreted Corpora-LINC, April 13-14, 2003, Budapest, Hungary (Nart B. Atalay, **Kemal Oflazer**, Bilge Say)
- 23) *Development of a Corpus and a Treebank for Present Day Written Turkish*, In Proceedings of the Eleventh International Conference for Turkish Linguistics, 2002 (Bilge Say, Deniz Zeyrek, **Kemal Oflazer**, Umut Ozge)
- 24) *Balkanet: A multilingual Semantic Network for Balkan Languages*, In Proceedings of the First International WordNet Conference, Mysore India, January 2002 (Sofia Stamou, **Kemal Oflazer**, Karel Pala, Dimitris Christoudoulakis, Dan Cristea, Dan Tufis, Svetla Koeva, George Totkov, Dominique Dutoit, Maria Grigoriadou)
- 25) *Statistical Morphological Disambiguation for Agglutinative Languages*, in Proceedings of COLING 2000, Saarbrücken, Germany, August, 2000, (Dilek Zeynep Hakkani-Tür, **Kemal Oflazer**, Gökhan Tür)
- 26) *Name Tagging Using Lexical, Contextual and Morphological Information*, In the Proceedings of the Workshop on Information Extraction Meets Corpus Linguistics at Second International Conference on Language Resources and Evaluation (LREC 2000), Athens, Greece, May 2000 (Gökhan Tür, Dilek Zeynep Hakkani-Tür, **Kemal Oflazer**)
- 27) *Dependency Parsing with an Extended Finite State Approach*, in Proceedings of the 37th Annual Meeting of the Association for Computational Linguistics, June 21-27, 1999, College Park, MD, USA (**Kemal Oflazer**)
- 28) *Design for a Turkish Treebank*, in Proceedings of the EACL Workshop on Linguistically Interpreted Corpora, June 12, 1999, Bergen, Norway (**Kemal Oflazer**, Dilek Zeynep Hakkani-Tür, Gökhan Tür)
- 29) *Practical Bootstrapping of Morphological Analyzers*, in Proceedings of EACL Workshop on Computational Natural Language Learning, June 12, 1999, Bergen, Norway, (**Kemal Oflazer**, Sergei Nirenburg)
- 30) *A Prototype Interlingua-Based MT System from English to Turkish*, in Proceedings of AMTA'98 – Conference of the Association for Machine Translation in the Americas, Springer Verlag Lecture Notes on Computer Science, October 28-31, 1998, Langhorne, PA, USA. (Dilek Z. Hakkani-Tür, Gökhan Tür, **Kemal Oflazer**, Eric Nyberg, Teruko Mitamura)
- 31) *Implementing Voting Constraints with Finite State Transducers*, In Proceedings of FSM-NLP'98 - ACL Workshop on Finite State Methods in Natural Language Processing, Ankara, Turkey, June 1998. (**Kemal Oflazer**, Gökhan Tür)
- 32) *Tagging English by Path Voting Constraints*, In Proceedings of COLING-ACL'98 – International Conference on Computational Linguistics, Montreal, Canada, August 1998, (Gökhan Tür, **Kemal Oflazer**)
- 33) *Morphological Disambiguation by Voting Constraints*, in Proceedings of ACL/EACL'97, 35th Annual Meeting of the Association for Computational Linguistics, Madrid, Spain, July, 1997 (**Kemal Oflazer**, Gökhan Tür)
- 34) *A Constraint-based Case-frame Lexicon*, in Proceedings of COLING'96 – International Conference on Computational Linguistics, Copenhagen, Denmark, August 1996 (**Kemal Oflazer**, Okan Yilmaz)
- 35) *Error-tolerant Tree Matching*, in Proceedings of COLING'96 – International Conference on Computational Linguistics, Copenhagen, Denmark, August 1996 (**Kemal Oflazer**)

- 36) *Tactical Generation in a Free Constituent Order Language*, in Proceedings of 8th International Workshop on Natural Language Generation, Sussex, England, June 1996, (Dilek Hakkani, **Kemal Oflazer**, İlyas Çiçekli)
- 37) *Combining Hand-crafted Rules and Unsupervised Learning in Constraint-based Morphological Disambiguation*, in Proceedings of the ACL-SIGDAT Conference on Empirical Methods in Natural Language Processing Philadelphia, PA, USA, May 1996, (**Kemal Oflazer**, Gökhan Tür)
- 38) *Error Tolerant Finite-state Recognition*, in Proceedings of the International Workshop on Parsing Technologies (IWPT'95), Prague, Czech Republic, September 1995 (**Kemal Oflazer**)
- 39) *A Constraint-based Case-frame Lexicon Architecture*, in Proceedings of the ESSLI Workshop on the Computational Lexicon, Barcelona, Spain, August 1995. (**Kemal Oflazer**, Okan Yılmaz)
- 40) *Spelling Correction in Agglutinative Languages*, in Proceedings of the 4th ACL Conference on Applied Natural Language Processing, Stuttgart, Germany, October 1994 (**Kemal Oflazer**, Cemalettin Güzey)
- 41) *Tagging and Morphological Disambiguation of Turkish Text*, in Proceedings of the 4th ACL Conference on Applied Natural Language Processing, Stuttgart, Germany, October 1994 (**Kemal Oflazer**, İlker Kuruöz)
- 42) *Parsing Turkish using the Lexical-Functional Grammar Formalism*, in Proceedings of COLING'94, The 15th Conference on Computational Linguistics, Kyoto Japan, August 1994, (Zelal Güngördü, **Kemal Oflazer**)
- 43) *A Tool for Tagging Turkish Text*, in Proceedings of the 3rd Turkish Symposium on Artificial Intelligence and Artificial Neural Networks, Ankara, June 1994 (**Kemal Oflazer**)
- 44) *Turkish Natural Language Processing Initiative: An overview*, in Proceedings of the 3rd Turkish Symposium on Artificial Intelligence and Artificial Neural Networks, Ankara, June 1994. (**Kemal Oflazer**, Cem Bozşahin)
- 45) *Using a Corpus to Teach Turkish Morphology*, in Proceedings of the Seventh Twente Workshop on Language Technology, Enschede, The Netherlands, June 1994, (Halil A. Güvenir, **Kemal Oflazer**)
- 46) *A Text Tagger for Turkish*, in Proceedings of the 2nd Turkish Symposium on Artificial Intelligence and Artificial Neural Networks, İstanbul, June 1993, (**Kemal Oflazer**)
- 47) *Genetic Synthesis of Unsupervised Learning Algorithms*, In Proceedings of the 2nd Turkish Symposium on Artificial Intelligence and Artificial Neural Networks, İstanbul, June 1993. (Ali Daşdan, **Kemal Oflazer**)
- 48) *A Lexical Functional Grammar for a Subset of Turkish*, In Proceedings of the 2nd Turkish Symposium on Artificial Intelligence and Artificial Neural Networks, İstanbul, June 1993, (Zelal Güngördü, **Kemal Oflazer**)
- 49) *An ATN grammar for a Subset of Turkish*, In Proceedings of the Second Turkish Symposium on Artificial Intelligence and Artificial Neural Networks, İstanbul, June 1993, (Coşkun Demir, **Kemal Oflazer**)
- 50) *Two-level Specification of Turkish Morphology*, in Proceedings of EACL'93, the Sixth Conference of the European Chapter of the Association of Computational Linguistics, Utrecht, the Netherlands, April 1993 (**Kemal Oflazer**)
- 51) *A Study in Connectionist Modelling of Hard-constraint Problems: Solving Tangram Puzzles*, In Proceedings of ISCIS VII - The Seventh International Conference on Computer and Information Sciences, Kemer, Turkey, November 1992. (**Kemal Oflazer**)

- 52) *A Connectionist Approach to Solving Tangram Puzzles*, in ARTIFICIAL NEURAL NETWORKS II: Proceedings of the 1992 International Conference on Artificial Neural Networks - ICANN 92, Brighton, England, September 1992 (**Kemal Oflazer**)
- 53) *A Rotation, Scaling and Translation Invariant Pattern Classification System*, in Proceedings of the 11th International Conference on Pattern Recognition, The Hague, The Netherlands, August 1992 (Cem Yüceer, **Kemal Oflazer**)
- 54) *Parsing Agglutinative Word Structures and its Application to Spelling Checking in Turkish*, in Proceedings of COLING'92-14th Conference on Computational Linguistics, Nantes, France, July 1992, (Ayşın Solak, **Kemal Oflazer**)
- 55) *Implementation Details and Performance Evaluation of a Spelling Checker for Turkish*, in Proceedings of Sixth International Conference on Computer and Information Sciences, Side, October 1991, (Ayşın Solak, **Kemal Oflazer**)
- 56) *A Rotation, Scaling and Translation Invariant Pattern Classification System*, In Proceedings of Sixth International Conference on Computer and Information Sciences, Side, October 1991 (Cem Yüceer, **Kemal Oflazer**)
- 57) *Solving Tangram Puzzles*, In Proceedings of Sixth International Conference on Computer and Information Sciences, Side, October 1991, (Zelal Güngördü, **Kemal Oflazer**)
- 58) *Parallel Implementation of the Backpropagation Algorithm on Hypercube Systems*, in Proceedings of the NATO Advanced Study Institute on Parallel and Distributed Computing, (Springer Verlag), Ankara, Turkey, July 1991. (Cevdet Aykanat, **Kemal Oflazer**, Radwan Tahboub)
- 59) *Experiments with Parallel Backpropagation on a Hypercube Parallel Processor System*, in ARTIFICIAL NEURAL NETWORKS I: Proceedings of the 1991 International Conference on Artificial Neural Networks - ICANN 91, Helsinki, Finland June 1991. (Deniz Ercoşkun, **Kemal Oflazer**)
- 60) *Connectionist Modeling of Hyphenation in Turkish*, in Proceedings of Fifth International Symposium on Computer and Information Sciences, Göreme, October 1990, (**Kemal Oflazer**)
- 61) *Experiments with Parallel Sorting on iPSC/2 Multicomputer*, In Proceedings of Fifth International Symposium on Computer and Information Sciences, Göreme, October 1990, (Argun Dervis, **Kemal Oflazer**, Fikret Erçal)
- 62) *A Finite State Machine for Turkish Syllable Structure Analysis*, In Proceedings of Fifth International Symposium on Computer and Information Sciences, Göreme, October 1990 (Ayşın Solak, **Kemal Oflazer**)
- 63) *Design and Implementation of a Spelling Checker for Turkish*, In Proceedings of Fifth International Symposium on Computer and Information Sciences, Göreme, October 1990. (Ayşın Solak, **Kemal Oflazer**)
- 64) *Implementation of Backpropagation Learning Algorithm on a Hypercube Parallel Processor*, in Proceedings of Fifth International Symposium on Computer and Information Sciences, Göreme, October 1990, (**Kemal Oflazer**, Deniz Ercoşkun)
- 65) *Partitioning in parallel processing of production systems*, in Proceedings of International Conference on Parallel Processing, IEEE Computer Society and ACM, August 1984, Michigan. (**Kemal Oflazer**)
- 66) *A reconfigurable VLSI architecture for a database processor*, in Proceedings of National Computer Conference, Anaheim, California, May 1983, (**Kemal Oflazer**)
- 67) *MISE: Machine for In-System Evaluation of custom VLSI Chips for Real-time systems*, In Proceedings of the Real-Time Systems Symposium, December, 1982, (Roberto Bisiani, Michael J. Foster, H.T. Kung, **Kemal Oflazer**)

- 68) *RAP.3 - A multi-microprocessor cell architecture for the RAP database machine*, In Proceedings of the International Workshop on High-Level Language Computer Architecture, Ft. Lauderdale, Florida, May 1980, (**Kemal Oflazer**, Esen A. Özkarahan, Kenneth C. Smith)
 - 69) *Microprocessor based modular database processors*, In Proceedings of Fourth International Conference on Very Large Databases Berlin, Germany, 1978, (Esen A. Özkarahan, **Kemal Oflazer**)
- i) OTHER PUBLICATIONS, INCLUDING TRANSLATIONS, RESEARCH NOTES, LIMITED-CIRCULATION REPORTS
- 1) *Generating Turkish from Interlingua*, Technical Report CMU-LTI-97-152. Carnegie Mellon University, Center for Machine Translation, Pittsburgh, PA, USA, September 1997 (Dilek Z. Hakkani, Gökhan Tür, Teruko Mitamura, Eric H. Nyberg, **Kemal Oflazer**)
 - 2) *A multi-microprocessor architecture for a cellular database machine – RAP*, Technical Report IS – DB 5, Department of Computer Engineering – Middle East Technical University, December 1978. (**Kemal Oflazer**, Esen A. Özkarahan)
- N) **NUMBER OF CITATIONS TO PUBLICATIONS:** 565 (Includes all SCI, SSCI, AHCI, Other Journal, Conference and Workshop and Theses citations)
- Citations by others : 525
 - Self Citations : 40
- O) **CURRENT RESEARCH INTERESTS**
- Statistical Machine Translation
 - NLP-based Tools for Interactive Reading and Advanced Second Language Learning
 - Statistical Language Modeling for Morphologically Complex Languages
 - Finite State Methods in Language Processing
 - Machine Learning for Language Processing
- P) **PROJECT GRANTS**
- *Statistical Machine Translation between English and Turkish*, Supported by TÜBİTAK (Turkish NSF), Principal Investigator. 2006-2008 100,800 YTL
 - *Developing a Lexical Functional Grammar for Turkish*, Supported by TÜBİTAK (Turkish NSF), Principal Investigator. 2006-2008 110,400 YTL (in collaboration with Palo Alto Research Center (PARC) in the context of the ParGram Project (<http://www2.parc.com/istl/groups/nltp/pargram/>))
 - LINGBROWSER: *A NLP-based tool for Linguistic Exploration*, Supported by US NSF and TÜBİTAK (Turkish NSF), Co-Principal Investigator. 2006-2008, 46,200 YTL (\approx USD 33K) (in collaboration with Prof. Sharon Inkelaş of UC Berkeley)
 - SMARTREADER: *A tablet-PC based mobile, active, and interactive tool for advanced language learning.*, Machine-readable Dictionary License grant by Oxford University Press, 2004–2005

- *Developing Lexical Resources for Turkish for Speech Applications*, Principal investigator, Sub-contractor to FP5 Project LC-Star (2003-2004) ~EURO 75 000 for Sabancı University
- *Developing a Turkish WordNet*, Co-investigator within the BalkaNet Project Consortium (European Commission Grant IST 2000 29388) EURO ~185,000 for Sabancı University
- *Developing Language Engineering Resources for Low-Density Languages*, NATO Collaborative Linkage Grant, Co-Principal Investigator (along with Prof. Sergei Nirenburg of NMSU and Prof. Oleg Kapanadze of Tbilisi State University, Georgia), BF 231,000, (1999-2000)
- *Unified Electronic Lexicon of Turkish*, TÜBİTAK (Turkish NSF) and US NSF Joint Grant (Travel support) , Co-Principal Investigator (along with Prof. Sharon Inkelaş of University of California Berkeley), USD 16,000 (Travel Grant) 2000 - 2004
- *Design and Implementation of a Finite State Parser for Turkish*, TÜBİTAK(Turkish NSF), Principal Investigator, Equipment Grant only, 2000 – 2002
- *Developing of a Turkish Treebank Database* , TÜBİTAK (Turkish NSF) , Awarded Fall 1999, Co-Principal Investigator, (with Bilge Say of Information Institute, METU), Equipment Grant only, 2000 – 2002.
- *Developing a Turkish Morphological Analyzer*, IBM Corporation (1996), USD 50,000.
- *TU-LANGUAGE: Establishing Computational Foundations and Applications for Natural Language Processing In Turkish* (1994-1999) NATO Science for Stability Program, (Project Director and Principal Investigator) ~US\$ 620,000 (Hardware, Software, Travel)