



Associate Professor Umit GUZ  
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 Engineering Faculty,  
 ISIK University  
 guz@isikun.edu.tr

1. **Name:** Umit GUZ
2. **Date of Birth:** 17.06.1971
3. **Academic Title:** Assoc. Prof.
4. **Education**

DATES	DEGREE	UNIVERSITY	DEPARTMENT
1997-2002	PhD	Istanbul University, The Institute of Science	Electronics Engineering
1995-1997	MSc	Istanbul University, The Institute of Science	Electronics Engineering
1990-1994	BSc	Istanbul University, The Institute of Science	Electronics Engineering

5. **Academic/Employment History**

DATES	TITLE	UNIVERSITY / INSTITUTION
2013-	Assoc. Prof.	ISIK University, Engineering Faculty, Department of Electrical-Electronics Engineering, Istanbul, Turkey.
2008-2013	Assist. Prof.	ISIK University, Engineering Faculty, Department of Electrical-Electronics Engineering, Istanbul, Turkey.
2007-2008	International Research Fellow	International Computer Science Institute (ICSI) Speech Group, University of California at Berkeley, Berkeley, CA, USA.
2006-2007	International Research Fellow	SRI (Stanford Research Institute) - International, Information and Computing Sciences Division (ICS), Speech Technology and Research (STAR) Laboratory, Menlo Park, CA, USA.
2002-2006	Research Associate, Instructor, PhD.	ISIK University, Engineering Faculty, Department of Electronics Engineering, Istanbul, Turkey.
1998-2002	Research and Teaching Assistant	ISIK University, Engineering Faculty, Department of Electronics Engineering, Istanbul, Turkey.
1995-1998	Research and Teaching Assistant	Istanbul University, Engineering Faculty, Department of Electronics Engineering, Istanbul, Turkey.

6. **Supervised MSc and PhD Theses**

6.1. **MSc Theses**

- [1] Doğan Dalva, *Automatic Speech Recognition for Turkish Spoken Language*, May 21, 2012. (Co-advisor: Assist. Prof. Hakan Gurkan), ISIK University, Graduate School of Science and Engineering, Department of Electronics Engineering.
- [2] Izel D. Revidi, *Prosodic, Morphological and Lexical Feature Extraction of Turkish Broadcast News Data*. June 2014. (Co-advisor: Assist. Prof. Hakan Gurkan), ISIK University, Graduate School of Science and Engineering, Department of Electronics Engineering.

## 6.2. PhD Theses

- [1] Doğan Dalva, *Co-training Using Prosodic, Lexical and Morphological Information for Automatic Sentence Segmentation of Turkish Spoken Language*. (2014- ) (Co-advisor: Assist. Prof. Hakan Gurkan), ISIK University, Graduate School of Science and Engineering, Department of Electronics Engineering.

## 7. Publications

### 7.1. Journal Publications (SCI-Expanded)

- [1] **Umit Guz**, "A Novel Image Compression Method Based on Classified Energy and Pattern Building Blocks", Special Issue on Theory and Application of General Linear Image Processing (GLIP), EURASIP Journal on Advances in Signal Processing, Hindawi Publishing Company, Volume 2011, doi:10.1155/2011/730694, Article ID 730694, pp.1-20, 2011.
- [2] **Umit Guz**, Gokhan Tur, Dilek Hakkani-Tür, Sébastien Cuendet, "Cascaded Model Adaptation for Dialog Act Segmentation and Tagging", Computer, Speech and Language (CSL), Volume 24, Issue 2, pp.289-306, Elsevier, April 2010.
- [3] **Umit Guz**, Sébastien Cuendet, Gokhan Tur, Dilek Hakkani-Tür, "Multi-View Semi-Supervised Learning for Dialog Act Segmentation of Speech", IEEE Transactions on Audio, Speech and Language Processing, Volume 18, Issue 2, pp.320-329, February 2010.
- [4] **Umit Guz**, Benoit Favre, Dilek Hakkani-Tür, Gokhan Tur, "Generative and Discriminative Methods using Morphological Information for Sentence Segmentation of Turkish", Special Issue on Processing Morphologically Rich Languages, IEEE Transactions on Audio, Speech and Language Processing, Volume 17, Issue 5, pp. 895-903, July 2009.
- [5] Hakan Gurkan, **Umit Guz**, B. Siddik Yarman, "EEG Signal Compression Based on Classified Signature and Envelope Vector Sets", Special Issue on Bridging Technology Innovations to Foundations, International Journal of Circuit Theory and Applications, John WILEY & Sons, Volume 37, Issue 2, pp.351-363, March 2009.
- [6] Hakan Gurkan, **Umit Guz**, B. Siddik Yarman, "Modeling of Electrocardiogram Signals Using Predefined Signature and Envelope Vector Sets", Special Issue on Advances in Electrocardiogram Signal Processing and Analysis, EURASIP Journal on Applied Signal Processing, Hindawi, Volume 2007, Article ID. 12071, pp.1-12, 2007.
- [7] **Umit Guz**, Hakan Gurkan, Binboga Siddik Yarman, "A New Method to Represent Speech Signals via Predefined Signature and Envelope Sequences", Special Issue on Advances in Subspace-Based Techniques for Signal Processing and Communications, EURASIP Journal on Applied Signal Processing, Hindawi, Volume 2007, Article ID. 56382, pp.1-17, 2007.
- [8] B. Siddik Yarman, **Umit Guz**, Hakan Gurkan, "On the Comparative Results of "SYMPES: A New Method of Speech Modeling", AEU, International Journal of Electronics and Communications, Elsevier, Volume 60, Issue 6, pp.421-427, June 2006.
- [9] B. Siddik Yarman, Hakan Gurkan, **Umit Guz**, Birep Aygun, "A New Modeling Method of the ECG Signals Based on the Use of an Optimized Predefined Functional Database", Acta Cardiologica, An International Journal of Cardiology, Volume 58 (3), Brief Communications pp.273-275, June 2003.

### 7.2. Journal Publications (Non SCI-Expanded)

### 7.3. International Conference Papers

- [1] Dogan Dalva, Izel D. Revidi, **Umit Guz**, Hakan Gurkan, "Extraction and Comparison of Various Prosodic Feature Sets on Sentence Segmentation Task for Turkish Broadcast News Data", IEEE JCSSE 2014, The 11th International Joint Conference on Computer Sciences and Software Engineering, May 14-16, 2014, Pattaya, THAILAND.
- [2] Inci Zaim Gokbay, Murat Gezer, **Umit Guz**, Hakan Gurkan, B. Siddik Yarman, "Compression of the CT Images using Classified Energy and Pattern Blocks", IEEE EMBC 2013, 35th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (IEEE EMBS), July 03-07, 2013, Osaka, JAPAN.
- [3] Hakan Gurkan, **Umit Guz**, B. Siddik Yarman, "A Novel Biometric Recognition Approach using Electrocardiogram Signals", IEEE EMBC 2013, 35th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (IEEE EMBS), July 03-07, 2013, Osaka, JAPAN.
- [4] Burak Sisman, **Umit Guz**, Hakan Gurkan, B. Siddik Yarman, "A New Speech Coding Algorithm using Zero Cross and Phoneme based SYMPES", IEEE ISSCS 2013, International Symposium on Signals, Circuits & Systems, July 11-12, 2013, Iasi, Romania.
- [5] Hakan Gurkan, **Umit Guz**, B. S. Yarman, "A Novel Human Identification System based on Electrocardiogram Features", IEEE ISSCS 2013, International Symposium on Signals, Circuits & Systems, July 11-12, 2013, Iasi, Romania.
- [6] Inci Zaim Gokbay, Murat Gezer, Umit Guz, Hakan Gurkan, B. S. Yarman, "A Novel Computed Tomography Image Compression Method based on Classified Energy and Pattern Blocks", IEEE ISSCS 2013, International Symposium on Signals, Circuits & Systems, July 11-12, 2013, Iasi, Romania (invited paper).

- [7] **Umit Guz**, Hakan Gurkan, B. Siddik Yarman, "A Novel Image Compression Method Based on Classified Energy and Pattern Blocks: Initial Results", Proceedings of the IEEE ISCIS 2010, IEEE 25th International Symposium on Computer and Information Sciences, pp.283-288, ISBN:978-90-481-9793-4, September 22-24, 2010, London, United Kingdom.
- [8] Hakan Gurkan, **Umit Guz**, B. Siddik Yarman, "A Novel Hybrid Electrocardiogram Signal Compression Algorithm with Low Bit-Rate", Proceedings of the IEEE ISCIS 2010, IEEE 25th International Symposium on Computer and Information Sciences, pp.95-98, ISBN:978-90-481-9793-4, September 22-24, 2010, London, United Kingdom.
- [9] **Umit Guz**, Hakan Gurkan, B. Siddik Yarman, "A Novel Noise Robust and Low Bit Rate Speech Coding Algorithm", Proceedings of the IEEE ISCIS 2009, IEEE 24th International Symposium on Computer and Information Sciences, pp.471-474, September 14-16, 2009, METU, Northern Cyprus Campus.
- [10] **Umit Guz**, Sébastien Cuendet, Dilek Hakkani-Tür, Gokhan Tur, "Co-training Using Prosodic and Lexical Information for Sentence Segmentation", Interspeech, August 27-31, 2007, Antwerp, BELGIUM. (This paper is supported by J. William Fulbright Post-Doctoral Research Fellowship Fund and The Scientific and Technological Research Council of Turkey, TUBITAK-BAYG).
- [11] **Umit Guz**, Hakan Gurkan, B. S. Yarman, "A New Algorithm for High Speed Speech and Audio Coding", Proceedings of ECCTD'07 European Conference on Circuit Theory and Design, August 26-30, 2007, Seville, SPAIN.
- [12] Hakan Gurkan, **Umit Guz**, B. S. Yarman, "EEG Signal Compression Based on Classified Signature and Envelope Vector Sets", Proceedings of ECCTD'07 European Conference on Circuit Theory and Design, August 26-30, 2007, Seville, SPAIN.
- [13] **Umit Guz**, Hakan Gurkan, B. S. Yarman, "A Novel Fast Algorithm for Speech and Audio Coding", IEEE ISCAS2007, International Symposium on Circuits and Systems, pp.4020-4023, May 27-30, 2007, New Orleans, USA.
- [14] Gokhan Tur, **Umit Guz**, Dilek Hakkani-Tür, "Model Adaptation for Dialog Act Tagging", IEEE/ACL 2006, Workshop on Spoken Language Technology, pp.94-97, December 10-13, 2006, ARUBA. (This paper is supported by the Scientific and Technological Research Council of Turkey, TUBITAK-BAYG).
- [15] **Umit Guz**, Hakan Gurkan, B. Siddik Yarman, "A New Speech Modeling Method: SYMPES", IEEE ISCAS2006, International Symposium on Circuits and Systems, Conference Digest-CD, pp.1860-1863, May 21-24, 2006, Kos, GREECE.
- [16] **Umit Guz**, Hakan Gurkan, B. Siddik Yarman, "A New Coding Method for Speech and Audio Signals", EURASIP, EUSIPCO2005, 13th European Signal Processing Conference, Conference Digest-CD, September 4-8, 2005, Antalya, TURKEY.
- [17] Gurkan Hakan, **Guz Umit**, Yarman B. S., "An Efficient ECG Data Compression Technique Based on Predefined Signature and Envelope Vector Banks", IEEE ISCAS2005, International Symposium on Circuits and Systems, Vol.II, pp.1334-1337, May 23-26, 2005, Kobe, JAPAN. (This paper is supported by the Scientific and Technological Research Council of Turkey, TUBITAK-BAYG).
- [18] **Guz Umit**, Gurkan Hakan, Yarman B. S., "A Novel Method to Represent the Speech Signals by Using Language and Speaker Independent Predefined Functions Sets", Proceedings of IEEE ISCAS2004 International Symposium on Circuits and Systems, Vol.III, pp.457-460, May 23-26, 2004, Vancouver, CANADA.
- [19] Gurkan Hakan, **Guz Umit**, Yarman B. S., "A Novel Representation Method for ElectroMyoGram (EMG) Signals with Predefined Signature and Envelope Functional Bank", Proceedings of IEEE ISCAS2004 International Symposium on Circuits and Systems, Vol.IV, pp.69-72, May 23-26, 2004, Vancouver, CANADA.
- [20] **Umit Guz**, B. S. Yarman, Hakan Gurkan, "A New Word Recognition Algorithm by Using Signature and Envelope Feature Spaces", Proceedings of 16th European Conference on Circuit Theory and Design (ECCTD'03), Vol.III, pp.161-164, September 1-4, 2003, Kraków, POLAND.
- [21] B. S. Yarman, Hakan Gurkan, **Umit Guz**, Birep Aygun, "A New Modeling Method of the ElectroCardioGram (ECG) Signals Based on the Use of an Optimized Predefined Functional Database", Proceedings of Brief Communications of the International Society of Non-Invasive Cardiology, 19th European Congress, May 8-10, 2003, Istanbul, TURKEY.
- [22] Hakan Gurkan, **Umit Guz**, B. S. Yarman, "Modeling of EEG Signals by Using Predefined Functional Bases", Proceedings of EMBEC'02 2nd European Medical and Biological Engineering Conference, Proceedings of International Federation for Medical & Biological Engineering, pp.440-441, December 4-8, 2002, Vienna, AUSTRIA.
- [23] Yarman B. S., Gurkan Hakan, **Guz Umit**, Aygun Birep, "A Novel Method to Represent ECG Signals via Predefined Personalized Signature and Envelope Functions", EMBEC2001 23rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Vol. III, pp.2150-2153, October 25-28, 2001, Istanbul, TURKEY.
- [24] **Umit Guz**, B. S. Yarman, Hakan Gurkan, "A New Method to Represent Speech Signals via Predefined Functional Bases", Proceedings of ECCTD'01 European Conference on Circuit Theory and Design, Vol.II, pp.5-8, August 28-31, 2001, Espoo, FINLAND.
- [25] **Guz Umit**, "Modeling of Linear Time Invariant Systems by Using Frequency Domain Data", First IEEE Balkan Conference on Signal Processing, Communications, Circuits and Systems, Conference Digest-CD, June 2-3, 2000, Istanbul, TURKEY.

## 7.4. Book Chapters

## 7.5. National Journal Publications

## 7.6. National Conference Papers

- [1] Dogan Dalva, Izel D. Revidi, **Umit Guz**, Hakan Gurkan, “*Extracting the Prosodic Information for Turkish Broadcast News Data and Using on the Sentence Segmentation Task*”, IEEE SIU 2014, 22nd Signal Processing and Communications Applications Conference, April 23-25, 2014, Karadeniz Technical University, Trabzon, Turkey.
- [2] Inci Zaim Gokbay, **Umit Guz**, Hakan Gurkan, B. S. Yarman and Hadi Sasani, “*Breast Cancer Data Modeling Imaged with the CT Modality via Predefined Energy and Pattern Blocks*”, TIPTEKNO 2013, National Conference on Medical Technologies, October31-November02, 2013, Antalya, Turkey.
- [3] Inci Zaim Gokbay, **Umit Guz**, Hakan Gurkan, B. S. Yarman, “*A Novel Approach on Compressing Medical Images: SYMPES*”, TurkMIC2012, Turkish Medical Informatics Conference, Innovation Health Informatics, pp.55-64, November 15-18, 2012, Antalya, Turkey.
- [4] Hakan Gurkan, **Umit Guz**, B. S. Yarman, “*A Novel Electroencephalogram (EEG) Compression Technique*”, Proceedings of 16th IEEE Signal Processing and Communication Applications Conference (SIU2008), April 20-22, 2008, Didim, Turkey.
- [5] **Umit Guz**, Hakan Gurkan, B. S. Yarman, “*A Novel Language and Speaker Independent Method for the Modeling of the Speech Signals by using Signature and Envelope Function Sets*”, Proceedings of ELECO 2004, National Symposium on Electrical-Electronics and Computer Engineering, pp. 279-283, December 8-12, 2004, Bursa, Turkey.
- [6] Hakan Gurkan, **Umit Guz**, B. S. Yarman, “*Compression of the ElectroCardioGram (ECG) Signals by using Signature and Envelope Vector Banks*”, Proceedings of ELECO 2004, National Symposium on Electrical-Electronics and Computer Engineering, pp.274-283, December 8-12, 2004, Bursa, Turkey.
- [7] **Umit Guz**, Hakan Gurkan, B. S. Yarman, “*Definition of A New Isolated Word Recognition Algorithm by using Predefined Signature and Envelope Vector Banks*”, Proceedings of 11th IEEE Signal Processing and Communication Applications Conference (SIU2003), June 18-20, 2003, Koc University, Istanbul, Turkey.
- [8] Hakan Gurkan, **Umit Guz**, B. S. Yarman, “*Modeling of the ElectroMyoGram (EMG) Signals by using Unique Signature and Envelope Vector Banks*”, Proceedings of 11th IEEE Signal Processing and Communication Applications Conference (SIU2003), June 18-20, 2003, Koc University, Istanbul, Turkey.
- [9] **Umit Guz**, Hakan Gurkan, B. S. Yarman, “*Optimum Modelling of the Speech Signals with Generalized Speaker Independent Predefined Basic Sound and Envelope Vector Banks*”, Proceedings of ELECO 2002, National Symposium on Electrical-Electronics and Computer Engineering, December 18-22, 2002, Bursa, Turkey.
- [10] Hakan Gurkan, **Umit Guz**, B. S. Yarman, “*Modeling of the ElectroCardioGram (ECG) Signals with Generalized Signature and Envelope Vector Banks*”, Proceedings of ELECO 2002, National Symposium on Electrical-Electronics and Computer Engineering, December 18-22, 2002, Bursa, Turkey.
- [11] **Umit Guz**, Hakan Gurkan, B. S. Yarman, “*A New Approach for Determination of the Optimum Signature and Envelope Functions*”, Proceedings of the IEEE Signal Processing and Communication Applications Conference (SIU2002), Vol.2, pp.691-696, June 12-14, 2002, Denizli, Turkey.
- [12] Hakan Gurkan, **Umit Guz**, B. S. Yarman, “*A New Approach for the Modeling of the EEG (ElectroEncephaloGram) Signals by using Optimum Base Functions*”, Proceedings of IEEE Signal Processing and Communication Applications Conference (SIU2002), Vol.2, pp.1204-1209, June 12-14, 2002, Denizli, Turkey.
- [13] **Umit Guz**, Hakan Gurkan, B. S. Yarman, “*A Novel Approach for the Modeling of the Speech Signals by using Two Based Look-up Tables*”, Proceedings of IEEE Signal Processing and Communication Applications Conference (SIU2001), Vol.2, pp.693-698, April 25-27, 2001, Gazi Magusa, Turkish Republic of Northern Cyprus.
- [14] R. Akdeniz, **Umit Guz**, Hakan Gurkan, B. S. Yarman, “*Modeling of the Speech Signals with Base Sequences Generated from Different Sound Sources*”, Proceedings of IEEE Signal Processing and Communication Applications Conference (SIU2001), Vol. 1, pp. 128-133, April 25-27, 2001, Gazi Magusa, Turkish Republic of Northern Cyprus.
- [15] Hakan Gurkan, **Umit Guz**, B. S. Yarman, “*Modeling of the ECG (ElectroCardioGram) Signals with Unique Base Functions*”, Proceedings of IEEE Signal Processing and Communication Applications Conference (SIU2001), Vol.2, pp.587-592, April 25-27, 2001, Gazi Magusa, Turkish Republic of Northern Cyprus.
- [16] **Guz Umit** “*Modeling of the Linear Time Invariant Systems by using Frequency Domain Data*”, Proceedings of National Automatic Control Conference (TOK'98), pp.245-252, Istanbul Technical University, October 1998, Istanbul, Turkey.

## 8. Research Projects

	PROJECT TITLE	POSITION	DATES	ARAŞTIRMA FONU	BUDGET
[1]	Co-training Using Prosodic, Lexical and Morphological Information for Automatic Sentence Segmentation of Turkish Spoken Language. TUBITAK Scientific Research Project. Project Number: 111E228	Principal Investigator (PI)	2012-2015	The Scientific and Technological Research Council of Turkey (TUBITAK) TUBITAK-ARDEB, Scientific and Technological Research Projects-1001	170680 TL
[2]	Extracting and Using Prosodic Information for Turkish Spoken Language Processing. TUBITAK CAREER Project. Project Number: 107E182	Principal Investigator (PI)	2008-2010 (completed)	The Scientific and Technological Research Council of Turkey (TUBITAK) TUBITAK-ARDEB, CAREER Project-3501	110667 TL
[3]	A New Low Bitrate Speech Coding Algorithm using Zero Cross and Phoneme Based SYMPES. BAP Project Project Number: 14A201	Principal Investigator (PI)	2014-2016	ISIK University, Research Fund	29500 TL
[4]	Fingertip ECG Signal Based Biometric Recognition System. BAP Project Project Number: 14A203	Researcher	2014-2016	ISIK University, Research Fund	20000 TL
[5]	Automatic Sentence Segmentation with Semi-Supervised Learning Algorithms using Prosodic and Lexical Information. BAP Project Project Number: 09A301	Principal Investigator (PI)	2009-2011 (completed)	ISIK University, Research Fund	8800 TL
[6]	Natural Language Understanding in Human/Human and Human/ Machine Spoken Dialogs.	Principal Investigator (PI)	2007-2008 (completed)	J. William Fulbright, USA Postdoctoral Research Fellowship, International Computer Science Institute (ICSI), Speech Group, University of California at Berkeley, CA, USA.	30000 USD
[7]	Natural Language Understanding in Human/Human and Human/ Machine Spoken Dialogs.	Principal Investigator (PI)	2006-2007 (completed)	TUBITAK-BIDEB, SRI (Stanford Research Institute) - International, Information and Computing Sciences Division (ICS), Speech Technology and Research (STAR) Laboratory, Menlo Park, CA, USA.	15000 USD
[8]	Natural Language Understanding in Human/Human and Human/ Machine Spoken Dialogs. BAP Project Project Number: 05B304	Principal Investigator (PI)	2006-2007 (completed)	ISIK University, Research Fund	6000 TL
[9]	Image Compression using Classified Energy and Pattern Blocks. BAP Project Project Number: 10B301	Principal Investigator (PI)	2010-2012 (completed)	ISIK University, Research Fund	8000 TL
[10]	Feature Extraction from ECG Signals for Biometric Recognition. BAP Project Project Number: 10A301	Researcher	2010-2012 (completed)	ISIK University, Research Fund	8000 TL

[11]	A Novel ECG Modeling Technique Using Classified Signature and Envelope Vector Sets. BAP Project Project Number: 06B302	Researcher	2007-2009 (completed)	ISIK University, Research Fund	9700 TL
[12]	A Mathematical Model for Electrocardiogram (ECG) Signals. BAP Project Project number: 400/03062005	Researcher	2005-2006 (completed)	Istanbul University, Research Fund	13284 TL

## 9. Administrative Positions

- [1] Oct.,2013-, Vice Chairman, Graduate School of Science and Engineering, ISIK University, Istanbul, Turkey.
- [2] 2011-, Member, Commission of Education Programs, ISIK University, Istanbul, Turkey.

## 10. Scientific and Professional Membership

- [1] IEEE Member, The IEEE Circuits and Systems Society, IEEE Signal Processing Society, USA.
- [2] IEICE Member, The Institute of Electronics, Information and Communication Engineers, JAPAN.
- [3] EURASIP, The European Association for Signal Processing.

## 11. Awards and Honours

- [1] 2005-2010, One of the best academic performer in ISIK University (Rank:3)
- [2] 2008-2010, TUBITAK CAREER - National Young Researcher Career Award, National Science and Technological Research Council of Turkey (TUBITAK).  
<http://www.icsi.berkeley.edu/icsi/news/2008/01/guz-tubitak-award>
- [3] 13.06.2008-20.09.2008, International Research Fellow, International Computer Science Institute (ICSI) Speech Group, UNIVERSITY of CALIFORNIA at BERKELEY, Berkeley, CA, USA.
- [4] 01.01.2007-06.01.2008, International Research Fellow, International Computer Science Institute (ICSI) Speech Group, UNIVERSITY of CALIFORNIA at BERKELEY, Berkeley, CA, USA.
- [5] 30.06.2006-31.12.2006, International Research Fellow, SRI (Stanford Research Institute)-INTERNATIONAL, Information and Computing Sciences Division (ICS), Speech Technology and Research (STAR) Laboratory, Menlo Park, CA, USA. <http://www.speech.sri.com/people/star-alumni.shtml>
- [6] 2006-2007, J. William FULBRIGHT Post-Doctoral Research Fellowship, USA. ([http://www.cies.org/schlr\\_directories/vsdir06/vs\\_dir\\_geo.htm#Turk](http://www.cies.org/schlr_directories/vsdir06/vs_dir_geo.htm#Turk))
- [7] 2005-2006, AT&T BELL LABS RESEARCH, Florham Park, New Jersey, USA, Post- Doctoral Research Fellowship, accepted as International Research Fellow.
- [8] 2005-2006, TUBITAK BIDEB 2219 Program, Postdoctoral Research Fellowship, National Science and Technological Research Council of Turkey (TUBITAK).
- [9] 2007, TUBITAK BIDEB 2219 Program (extension), Postdoctoral Research Fellowship, National Science and Technological Council of Turkey (TUBITAK).
- [10] 2005, TUBITAK-BIDEB 2224 Program, IEEE ISCAS 2005, Kobe, JAPAN, National Science and Technological Research Council of Turkey (TUBITAK).
- [11] 1995-1998, Research and Teaching Assistant Fellowship, The Institute of Science, Istanbul University.
- [12] 1995, 1st place in graduate exam (Rank:1 among 27 candidates), The Institute of Science, Department of Electronics Engineering, Istanbul University.

## 12. Courses Taught (Last Four Years)

Academic Year	Semester	Course	Hours		Number of Student
			Theoretical	Practice	
2013-2014	Fall	EE353 Signals and Systems	4	1	
		EE352 System Dynamics and Control	3	1	
		EE481 Special Topics (Applied Digital Signal Processing)	3	0	
	Spring				
	Summer School				
2012-2013	Fall	EE353 Signals and Systems	4	1	23
		EE330 Electronics 1	3	1	19
		EE481 Special Topics (Applied Digital Signal Processing)	3	0	18

	Spring	EE354 Digital Signal Processing	3	0	23
		EE488 Special Topics (Applied Speech and Audio Signal Processing)	3	0	9
	Summer School	-	-	-	-
2011-2012	Fall	EE353 Signals and Systems	4	1	22
		EE330 Electronics 1	3	1	30
	Spring	EE354 Digital Signal Processing	3	0	26
		EE488 Special Topics (Applied Speech and Audio Signal Processing)	3	0	10
	Summer School	EE330 Electronics 1	3	1	9
2010-2011	Fall	EE353 Signals and Systems	4	1	29
		EE330 Electronics 1	3	1	35
	Spring	EE586 Special Topics on Speech and Audio Signal Processing (Lisansüstü)	3	0	5
		EE354 Digital Signal Processing	3	0	41
	Summer School	EE353 Signals and Systems	4	1	5

### 13. Other Academic and Scientific Activities

#### 13.1. Postdoctoral Research

- [1] June 01, 2008 - October 01, 2008, *International Research Fellow*, International Computer Science Institute (ICSI), Speech Group, University of California at Berkeley, Berkeley, CA, USA
- [2] January 01, 2007 - January 08, 2008, *International Research Fellow*, International Computer Science Institute (ICSI), Speech Group, University of California at Berkeley, Berkeley, CA, USA.
- [3] June 30, 2006 - December 31, 2006, *International Research Fellow*, SRI (Stanford Research Institute)-International, Information and Computing Sciences Division (ICS), Speech Technology and Research (STAR) Laboratory, Menlo Park, CA, USA.

#### 13.2. Invited Talks / Seminars

- [1] Multisaund Project, TUBITAK-BILGEM UEKAE, Gebze, Turkey (October 6-7, 2011).
- [2] Umit Guz, "*Semi-Supervised Learning for Sentence Segmentation for Speech*", International Computer Science Institute (ICSI) Speech Group, UC Berkeley, CA, USA, (December 10, 2007).
- [3] Umit Guz, "*A New Method to Represent the Speech and Audio Signals via Predefined Signature and Envelope Sequences*", International Computer Science Institute (ICSI) Speech Group, UC Berkeley, CA, USA, (May 15, 2007).
- [4] ICSI's Berkeley EECS Annual Research Symposium (Bears) Open House, International Computer Science Institute (ICSI) Speech Group, UC Berkeley, CA, USA, (Feb. 15, 2007).
- [5] Umit Guz, "*Model Adaptation for Dialog-Act Tagging*", SRI-International, Speech Technology and Research (STAR) Lab., Menlo Park, CA, USA, (December 13, 2006).
- [6] Umit Guz, "*A Novel Speech Modeling Method: SYMPES (Systematic Procedure for Predefined Envelope and Signature Sequences)*", SRI-International, Speech Technology and Research (STAR) Lab., Menlo Park, CA, USA, (December 13, 2006).
- [7] Umit Guz, "*A New Method to Represent Speech Signals via Predefined Signature and Envelope Sequences*", ISIK University, Engineering Faculty, Department of Electronics Engineering, Istanbul, Turkey (May, 2006).
- [8] Umit Guz, "*A New Method to Represent Speech Signals via Predefined Functional Bases*", ISIK University, Engineering Faculty, Department of Electronics Engineering, Istanbul, Turkey (August, 2001).

#### 13.3. Reviewer Activities

- [1] IEEE Transactions on Audio, Speech and Language Processing (Referee).
- [2] Signal Processing, Elsevier (Referee).
- [3] EURASIP Journal on Advances in Signal Processing, Springer (Referee).
- [4] KNOSYS Knowledge-Based Systems, Elsevier (Referee).
- [5] TJEECS Turkish Journal of Electrical Engineering & Computer Sciences (Referee).
- [6] EUSIPCO European Signal Processing Conference (Referee).
- [7] Language Resources and Evaluation Journal, Springer (Referee).
- [8] IEEE SIU, Signal Processing and Communications Applications Conferences (Referee).

- [9] ELECO, Symposium on Electrical-Electronics and Computer Engineering (Referee).
- [10] ISCIS, International Symposium on Computer and Information Sciences (Referee).
- [11] WSEAS (The World Scientific Engineering Academy and Society) (Referee).
- [12] LREC 2012, 1st Workshop on Language Resources and Technologies for Turkic Languages, Istanbul, Turkey (Referee).
- [13] TUBITAK-ARDEB, CAREER – 3501, National Young Researcher Career Program, National Science and Technological Research Council of Turkey (TUBITAK) (Advisor).
- [14] TUBITAK-ARDEB 1001, The Support Programme for Scientific and Technological Research Projects, National Young Researcher Career Program, National Science and Technological Research Council of Turkey (TUBITAK) (Panelist/Referee).
- [15] TUBITAK-ARDEB, CAREER – 3501, National Young Researcher Career Program, National Science and Technological Research Council of Turkey (TUBITAK) (Panelist/Referee).
- [16] TUBITAK-ARDEB-KAMAG 1007, The support Programme for Research Projects of Public Institutions (Panelist/Referee).
- [17] TUBITAK-TEYDEB (Panelist/Referee).
- [18] SANTEZ, Republic of Turkey, Ministry of Science, Industry and Technology (Panelist/Referee).

#### **13.4. International and National Conference Technical Program Committee Membership**

- [1] 2nd International Workshop on Complex Dynamical Systems and Their Applications, October 24-26, 2013, ISIK University, Istanbul, Turkey (Technical Program Co-chair).
- [2] 2nd National Conference on EMC September 09-11, 2013, ISIK University, Istanbul, Turkey (Organizing Committee Member).
- [3] LREC 2012, 1st Workshop on Language Resources and Technologies for Turkic Languages, Istanbul, Turkey, 2012 (Local Committee Member).
- [4] 10th Math Symposium, ISIK University, 2011 (Organizing Committee Member).
- [5] IEEE ISCIS 2009, International Symposium on Computer and Information Sciences, METU Northern Cyprus Campus, 2009 (Co-Chair, Special Session on Audio, Speech and Language Processing).
- [6] IEEE SIU 2002, Signal Processing and Communications Applications Conference, Denizli, Turkey, 2002 (Technical Committee Member and Referee).
- [7] EMO, Istanbul, Undergraduate Design Project Competition (Jury member 2010, 2011, 2012).