

# M. Levent Arslan

## Address

- Boğaziçi University Electrical and Electronics Eng. Department, 34342, Bebek, Istanbul, TURKEY

## E-mail

- arslanle@boun.edu.tr

## Telephone

- Tel: +90 (212) 359 6421
- Fax: +90 (212) 287 2465

## Work Experience

- 1998–current - *Bogazici University - Istanbul - Academic Staff*
- 2005-current - *Sestek Speech Tech. Inc. - Istanbul - Technical Consultant*
- 2000-2007 - *GVZ Speech Tech. Inc. - Istanbul - Technical Consultant*
- 2000-2001 - *TUBITAK - Istanbul - Technical Consultant*
- 1998-2000 - *Sakhr Software Co. - Cairo, Egypt - Technical Consultant*
- 1996-1998 - *Entropic Research Lab. - Washington, DC, USA - Member of Technical Staff*
- 1994–1996 - *Texas Instruments - Dallas, TX, USA - Research Engineer*
- 1991–1996 - *Duke University - Durham, USA - Research Assistant*

## Education

- 1993-1996 *Ph.D. degree* - Duke University - Durham, USA
- 1991-1993 *M.S. degree* - Duke University - Durham, USA
- 1986-1991 *B.S degree* - Bogazici University - Istanbul, TURKEY
- 1984-1986 *High School Dipl.* - Fen Lisesi - Ankara, TURKEY

## Courses Taught

- 1 Introduction to Electric Circuits
- 2 Introduction to Digital Signal Processing
- 3 Speech Processing
- 4 Psychoacoustics
- 5 Advanced Speech Processing
- 6 Adaptive Filter Theory
- 7 Signals and Systems
- 8 Computer Tools for EE

## Patents

- 1 A. Haznedaroglu, L.M. Arslan, O. Buyuk, "Ses kayıtlarında anahtar kelime yakalayan cihaz", Sestek, Tescil no: 2007 03727, 22 Ağustos, 2011.
- 2 L.M. Arslan, "Ses teknolojileri ile entegre otomatik sesli duyuru sistemi", Sestek, Tescil no: 2009 02660, 23 Ocak 2012.
- 3 L.M. Arslan, "Operatör destekli ses tanıma metodu", Sestek, Tescil no: 2009 00654, 22 Ağustos, 2011.
- 4 L. M. Arslan, "Otomatik dikte sistemlerinde konuşma sentezi ile teyit yöntemi ve bu yöntemin uygulanması için sistem", Sestek, Başvuru tarihi: 22 Temmuz 2010.
- 5 Türk, O., L. M. Arslan, and F. Deutsch. "Codebook-less Speech Conversion Method and System", Voxonic Inc., Patent Publication No.: US 2007/0213987, Publication Date: Sep. 13, 2007.
- 6 Türk, O., L. M. Arslan, and F. Deutsch. "Automatic Donor Ranking and Selection System and Method for Voice Conversion", Voxonic Inc., Patent Publication No.: US 2007/0027687, Publication Date: Feb. 1, 2007.
- 7 L.M. Arslan, and D. Talkin. "Stimmumwandlung", Microsoft Corporation, Issued September 2, 2003. Patent No: AT 6,615,174.
- 8 L.M. Arslan, and D. Talkin. "Voice Conversion System and Methodology", Microsoft Corporation, Issued September 2, 2003. Patent No: US 6,615,174.
- 9 L.M. Arslan, and D. Talkin. "Face Synthesis System and Methodology", Microsoft Corporation, Issued September 10, 2002. Patent No: US 6,449,595.

- 10 L.M. Arslan, A.V. Mccree, and V.R. Viswanathan. "Adaptive Weiner filtering using line spectral frequencies", Texas Instruments Inc., Issued July 17, 2001. Patent No: US 6,263,307.
- 11 L.M. Arslan, L.P. Netsch, and P.K. Rajasekaran. "Method of out of vocabulary word rejection", Texas Instruments Inc., Issued June 5, 2001. Patent No: US 6,243,677.
- 12 L.M. Arslan, and D. Talkin. "Face Synthesis System and Methodology", Entropic Research Inc., Issued September 16, 1999. Patent No: WO 9,946,734.
- 13 L.M. Arslan, and D. Talkin. "Voice Conversion System and Methodology", Entropic Research Inc., Issued August 13, 1998. Patent No: WO 9,835,340.
- 14 L.M. Arslan, A.V. Mccree, and V.R. Viswanathan. "Adaptive Weiner filtering using a dynamic suppression factor", Texas Instruments Inc., Issued Jan 6, 1998. Patent No: US 5,706,395.

## Journal Publications

- 1 C. Kasap, M.L. Arslan, "A unified approach to speech enhancement and voice activity detection", Turkish Journal of Electrical Engineering and Computer Sciences, vol. 21, pp. 527-547, 2013.
- 2 O. Buyuk, L. M. Arslan, "Combining log-spectral mean subtraction at different frequency resolutions for handset-channel compensation in single utterance speaker verification", IET Signal Processing, Vol. 6, Issue: 9, pp. 824-828, 2012.
- 3 O. Buyuk, M. L. Arslan, "Model selection and score normalization for text dependent single utterance speaker verification", Turkish Journal of Electrical Engineering and Computer Sciences, vol. 20, pp. 1277-1295, 2012.
- 4 O. Turk and L.M. Arslan, "Automatic Source Speaker Selection for Voice Conversion", Journal of the Acoust. Soc. of America, Vol. 125, Issue 1, pp. 480-491, 2009.
- 5 Gürel, A., L.M. Arslan, "Konuşma tanıma için insan-makine karşılaştırılması", Dilbilim Araştırmaları Dergisi, 77-90, 2008.
- 6 A. Savran, L.M. Arslan and L. Akarun, "Speaker Independent 3D Face Synthesis driven by Speech and Text", Signal Processing, 86 (10): 2932-2951, 2006.
- 7 E. Arısoy, H. Dutağacı, and L.M. Arslan, "A unified language model for large vocabulary continuous speech recognition of Turkish", Signal Processing, 86 (10): 2844-2862, 2006.
- 8 O. Turk, and L.M. Arslan. "Robust Processing Techniques for Voice Conversion", Computer Speech and Language, 20 (4): 441-467, 2006.

- 9 L.M. Arslan. "Modified Wiener Filtering", *Signal Processing*, vol. 86, pp. 267-272, 2006.
- 10 E. Arisoy, and L.M. Arslan. "A Universal Human Machine Speech Interaction Language for Robust Speech Recognition Applications", *Lecture Notes in Computer Science*, vol. 3206, pp. 261-267, 2004 (after TSD conference)
- 11 O.D. Orman and L.M. Arslan. "Comparison of Frequency Bands in Closed Set Speaker Identification Performance", *Lecture Notes in Artificial Intelligence*, vol. 1902, pp. 314-318, 2000 (after TSD conference)
- 12 L.M. Arslan and D. Talkin. "Codebook Based Face Point Trajectory Synthesis Algorithm using Speech Input", *Speech Communication Journal*, vol. 27, no. 2, pp. 81-93, March 1999.
- 13 L.M. Arslan "Speaker Transformation Algorithm using Segmental Codebooks (STASC)", *Speech Communication Journal*, vol. 28, pp. 211-226, June 1999.
- 14 L.M. Arslan and J.H.L. Hansen "Selective Training for Hidden Markov Model Recognition", *IEEE Trans. on Speech and Audio Processing*, vol.7, No.1, pp. 46-55, January 1999.
- 15 L.M. Arslan and J.H.L. Hansen "Likelihood Decision Boundary Estimation Between HMM Pairs in Speech Recognition", *IEEE Trans. on Speech and Audio Processing*, vol. 6, no. 4, July 1998.
- 16 L.M. Arslan and J.H.L. Hansen "A Study of Temporal Features and Frequency Characteristics in American English Foreign Accent", *Journal of Acoust. Soc. of America*, vol. 102, no. 1, pp. 28-40, July 1997. [Featured paper].
- 17 L.M. Arslan and J.H.L. Hansen "Speech Enhancement for Cross-Talk Interference", *IEEE Signal Processing Letters*, vol. 4, no. 4, pp. 92-95, April 1997.
- 18 L.M. Arslan and J.H.L. Hansen "Language Accent Classification in American English", *Speech Communication Journal*, vol. 18, no. 4, pp. 353-367, August 1996.
- 19 J.H.L. Hansen and L.M. Arslan "Robust Feature-Estimation and Objective Quality Assessment for Noisy Speech Recognition using the Credit Card Corpus", *IEEE Trans. on Speech and Audio Processing*, vol. 3, number 3, pp. 169-184, May 1995.
- 20 J.H.L. Hansen and L.M. Arslan "Markov Model Based Phoneme Class Partitioning for Improved Constrained Iterative Speech Enhancement", *IEEE Trans. on Speech and Audio Processing*, vol. 3, no. 1, pp. 98-104, January 1995.

## Conference Proceedings

- 1 L.M. Arslan, "Voice Biometrics", Euroforensics 2012, İstanbul, Turkey.
- 2 M. Erden, A. Haznedaroğlu, L.M. Arslan, "Meditalk ve Justtalk Turkish Automatic Dictation Systems", IEEE 19th Signal Processing and Communications Applications Conference, SIU-2011, 20-22 April 2011, Antalya, Turkey (Demo oturumu bildirisi).
- 3 M. Erden, L.M. Arslan, "Automatic Detection of Anger in Human-Human Call Center Dialogs", 12th Annual Conference of the International Speech Communication Association, InterSpeech 2011, 27-31 August 2011, Florence, Italy.
- 4 A. Haznedaroğlu, L.M. Arslan, "Confidence Measures for Turkish Call Center Conversations", 12th Annual Conference of the International Speech Communication Association, InterSpeech 2011, 27-31 August 2011, Florence, Italy.
- 5 O. Buyuk, L.M. Arslan, "SMM Tabanlı Mimaride Telefon-Kanal Tanıma İle Metne Bağımlı Konuşmacı Tanıma", SIU 2010, Diyarbakır, Turkey.
- 6 A. Haznedaroğlu, L.M. Arslan, "Çağrı Merkezi Görüşmelerine Yönelik Türkçe Geniş Dağarcıklı Sürekli Konuşma Tanıma Sistemi", SIU 2010, Diyarbakır, Turkey.
- 7 O. Turk, O. Buyuk, A. Haznedaroglu, L.M. Arslan, "Application of Voice Conversion for Cross-Language Rap Singing Transformation", IEEE Proc. ICASSP, Taiwan, 2009.
- 8 A. Haznedaroglu, O. Buyuk, L. M. Arslan, "Kelimeye Uyarlı Dil Modeli ile Anahtar Kelime Yakalama", SIU 2007, Eskisehir, Turkey
- 9 O. Buyuk, A. Haznedaroglu, L. M. Arslan, "Dil Modeli Uyarlanabilir Türkçe Ses Tanıma Yazılımı", SIU 2007, Eskisehir, Turkey
- 10 F. Burkhardt, N. Audibert, L. Malatesta, O. Turk, L.M. Arslan, V. Auberger, "Does Culture Makes A Difference?", Speech Prosody 2006 Conference, Dresden.
- 11 O. Turk and L.M. Arslan "Software Tools for Speech Therapy and Voice Quality Monitoring", 13th European Signal Processing Conference - EUSIPCO 2005, Antalya, Turkey.
- 12 E. Arisoy and L.M. Arslan "Turkish Dictation System for Broadcast News Applications", 13th European Signal Processing Conference - EUSIPCO 2005, Antalya, Turkey
- 13 O. Turk and L.M. Arslan "Donor Selection for Voice Conversion", 13th European Signal Processing Conference - EUSIPCO 2005, Antalya, Turkey
- 14 O. Turk, M. Schröder, B. Bozkurt, and L.M. Arslan "Voice Quality Interpolation for Emotional Text-To-Speech Synthesis", INTERSPEECH 2005, Lisbon, Portugal.
- 15 E. Arisoy and L.M. Arslan, "Türkçe Gazete Haberleri Dikte Sistemi", SIU 2005, Kayseri, Turkey.

- 16 A. Savran and L.M. Arslan "Speech Driven MPEG-4 Facial Animation for Turkish", SPECOM 2004, St. Petersburg, Russia.
- 17 O. Turk, and L.M. Arslan, 2004, "Pronunciation Scoring for the Hearing-Impaired", 9th International Conference Speech and Computer - SPECOM 2004, St. Petersburg, Russia.
- 18 E. Arisoy, L.M. Arslan, M.N. Demiralp, H.K. Ekenel, M. Kelepir, H.M. Meral, A.S. Özsoy, Ö. Şayli, O. Turk, B.C. Yolcu, "Acoustic Analysis of Turkish Sounds", 12th International Conference on Turkish Linguistics, 11-13 August 2004, Izmir, Turkey.
- 19 E. Arisoy and L.M. Arslan "Turkish Radiology Dictation System", SPECOM 2004, St. Petersburg, Russia.
- 20 O. Turk, O. Sayli, A.S. Ozsoy, and L.M. Arslan "Türkçe'de Ünlülerin Formant Frekans İncelemesi", 18. Ulusal Dilbilim Kurultayı 2004, Ankara, Turkey.
- 21 O. Turk and L.M. Arslan "Dayanıklı Konuşmacı Dönüştürme Yöntemleri", SIU 2004, Kusadasi, Turkey.
- 22 O. Turk and L.M. Arslan "Konuşma Terapisine Yönelik Konuşma Tanıma Yöntemleri", SIU 2004, Kusadasi, Turkey.
- 23 O. Turk and L.M. Arslan "Voice conversion methods for vocal tract and pitch contour modification", EUROSPEECH 2003, Geneva, Switzerland, 2003.
- 24 O. Turk and L.M. Arslan "Subjective Evaluations for Perception of Speaker Identity Through Acoustic Feature ", EUROSPEECH 2003, Geneva, Switzerland, 2003.
- 25 U. Naci and L.M. Arslan "Self score normalization and frame pruning techniques for speaker verification", ICANN-ICONIP 2003, Istanbul, Turkey.
- 26 O. Turk and L.M. Arslan "Konuşmacı dönüştürme için üç yeni yöntem", SIU 2003, 398-401, İstanbul, 2003.
- 27 O. Turk and L.M. Arslan "Konuşmacı kimliği algılanmasında akustik özneliklerin karşılaştırmalı analizi", SIU 2003, 394-397, İstanbul, 2003.
- 28 O. Turk, O. Sayli, H. Dutagaci and L.M. Arslan "A Sound Source Classification System Based On Subband Processing" in Proceedings of the 7th International Conference On Spoken Language Processing (ICSLP-2002), Denver, Colorado, USA, Sep. 2002, pp. 641-644.
- 29 O. Turk, O. Sayli, H. Dutagaci and L.M. Arslan "Alt Bant İşlemeye Dayalı Bir Ses Sınıflandırma Sistemi", 2002 Sinyal İşleme ve İletişim Uygulamaları Kurultayı (SIU-2002), Denizli, Türkiye, pp. 58-63.

- 30 H. Dutagaci and L.M. Arslan "Türkçe Konuşma Tanıma için İstatistiksel Dil Modelleri", 2002 Sinyal İşleme ve İletişim Uygulamaları Kurultayı (SIU-2002), Denizli, Türkiye, pp. 64-69.
- 31 L.M. Arslan and A. Koç "Gürültülü Ortamlara Dayanıklı Türkçe Sözcük Tanıma", 2002 Sinyal İşleme ve İletişim Uygulamaları Kurultayı (SIU-2002), Denizli, Türkiye, pp. 70-75.
- 32 D. Genççağa, L.M. Arslan and A.B. Ertüzün "Konuşma İşaretleri için Gerçek Zamanlı bir Formant Frekans Kestiricisi", 2002 Sinyal İşleme ve İletişim Uygulamaları Kurultayı (SIU-2002), Denizli, Türkiye, pp. 471-475.
- 33 H.K. Ekenel and L.M. Arslan "Türkçe Ses Sentezi için Ezgi Modelleri", 2002 Sinyal İşleme ve İletişim Uygulamaları Kurultayı (SIU-2002), Denizli, Türkiye, pp. 824-829.
- 34 M.U. Doğan and L.M. Arslan "TÜBİTAK-TURTEL Ses Tabanının Ayrık Kelime Tanıma Başarımının Konuşmacı Bazlı Değerlendirilmesi", 2002 Sinyal İşleme ve İletişim Uygulamaları Kurultayı (SIU-2002), Denizli, Türkiye, pp. 830-835.
- 35 O. Şayli, L.M. Arslan and S. Özsoy "Türkçe Ses Sentezi için Süre Modellemesi", 2002 Sinyal İşleme ve İletişim Uygulamaları Kurultayı (SIU-2002), Denizli, Türkiye, pp. 841-845.
- 36 O. Şayli, L.M. Arslan and A.S. Özsoy "Duration Properties of the Turkish Phonemes," International Conference on Turkish Linguistics, August 7-9, 2002.
- 37 O. Turk and L.M. Arslan "Subband Based Voice Conversion" in Proceedings of the 7th International Conference On Spoken Language Processing (ICSLP-2002), Denver, Colorado, USA, Sep. 2002, pp. 289-292.
- 38 O. Turk, O. Sayli, H. Dutagaci and L.M. Arslan "A Sound Source Classification System Based On Subband Processing" in Proceedings of the 3rd IEEE Benelux Signal Processing Symposium (SPS-2002), Leuven, Belgium, pp. 61-64, Mar. 2002.
- 39 H. Dutagaci and L.M. Arslan "Comparison of Statistical Language Models for Turkish Speech Recognition" in Proceedings of the 7th International Conference On Spoken Language Processing (ICSLP-2002), Denver, Colorado, USA, Sep. 2002, pp. 729-732.
- 40 O. Orman and L.M. Arslan "Konuşmacı Tanımayı İnceleyen Yeni Bir Dinleyici Sınaması", SIU Proc., pp. 116-121, G.Magosa, April 2001.
- 41 E. Ormanci, U.H. Nikbay, O. Turk and L.M. Arslan "Subjective Assessment Of Frequency Bands For Perception Of Speaker Identity" in Proceedings of the 7th International Conference On Spoken Language Processing (ICSLP-2002), Denver, Colorado, USA, Sep. 2002, pp. 2581-2584.
- 42 H. Ozer and L.M. Arslan "LPC İzge Düzgünlüğü ile Konuşma Aktivitesi Tespiti", SIU Proc., pp. 233-237 G.Magosa, April 2001.
- 43 U. Yapanel, M.U. Dogan and L.M. Arslan "Türkçe Anahtar Sözcük Yakalama Sistemi için farklı Atık Modellerinin Karşılaştırılması", SIU Proc., pp. 122-127, G.Magosa, April 2001.

- 44 O. Orman and L.M. Arslan "Frequency Analysis of Speaker Identification", A Speaker Odyssey: The Speaker Recognition Workshop, pp. 219-222 Crete, Greece, 2001.
- 45 V. Çal, H. Deliç and L. Arslan, "Reliable Transmission of LPC Speech-Coded over Fading Channels", Proceedings of the International Symposium on Telecommunications, pp. 430-433, Tehran, Iran, September 2001.
- 46 V. Çal, L. Arslan, and H. Deliç " Error Control for LPC-Coded Speech", International Conference on Signal Processing Applications and Technology, Dallas, USA, October 2000.
- 47 L.M. Arslan "A new universal language for Speech Recognition Applications", IEEE Proc. ICASSP, Istanbul, Turkey, May 2000, pp. 3747-3750.
- 48 O. Orman and L.M. Arslan " Tümleşik Gauss Modeller ve Vektör Nicemleme Yöntemleriyle Konuşmacı Tanıma", Proc. SIU, Antalya, May 2000.
- 49 O. Orman and L.M. Arslan " A Comparative Study on Closed Set Speaker Identification Using RBF Network and Modular Networks", Proc. TAINN, p. 291-296, Izmir, Turkey, June 2000.
- 50 L.M. Arslan "Türkçe Sürekli Konuşma Tanıma Sisteminin Sayı Tanıma Uygulaması", Sinyal İşleme ve İletişim Uygulamaları Kurultayı (SIU-1999), Ankara, Türkiye, pp. 64-67.
- 51 L.M. Arslan "Konuşma Tanıma ve Konuşma Sentezi Uygulamalarında en Uygun Fonetik Dizgenin Otomatik Seçimi", Sinyal İşleme ve İletişim Uygulamaları Kurultayı (SIU-1999), Denizli, Türkiye, pp. 539-542.
- 52 F. M. Galanes, J. Unverferth, L.M. Arslan and D. Talkin "Generation of lip-synched synthetic faces from phonetically clustered face movement data", AVSP Proceedings, pp. 191-194. Terrigal, Australia, December 1998.
- 53 L.M. Arslan and D. Talkin "3-D Face Point Trajectory Synthesis using an Automatically derived Visual Phoneme Similarity matrix", AVSP Proceedings, pp. 175-180. Terrigal, Australia, December 1998.
- 54 L.M. Arslan and D. Talkin "Speech Driven 3-D Face Point Trajectory Synthesis Algorithm", ICSLP Proceedings, Sydney, Australia, 1998.
- 55 L.M. Arslan and D. Talkin. "Speaker Transformation using Sentence HMM based alignments and detailed prosody modification", IEEE Proc. ICASSP, Seattle, USA, May 1998, pp 289-292.
- 56 L.M. Arslan and D. Talkin. "Voice Conversion by Segmental Codebook Mapping of Line Spectral Frequencies and Excitation Spectrum", EUROSPEECH Proceedings, vol. 3, pp. 1347-1350, Rhodes Greece, September 1997.
- 57 L.M. Arslan and J.H.L. Hansen. "A Study of Frequency Characteristics in Foreign Accent", IEEE Proc. ICASSP, vol. 2, pp. 1123-1126, Munich, Germany, April 1997.



- 58 L.M. Arslan and J.H.L. Hansen. "Improved HMM Training and Scoring Strategies", IEEE Proc. ICASSP, vol. 2, pp. 589-592, Atlanta, USA, May 1996.
- 59 L. Arslan, A. Mccree, and V. Viswanathan. "New Methods for Adaptive Noise Suppression", IEEE Proc. ICASSP, vol. 1, pp. 812-815, Detroit, USA, May 1995.
- 60 J.H.L. Hansen and L.M. Arslan. "Foreign Accent Classification using Source Generator Based Prosodic Features", IEEE Proc. ICASSP, vol. 1, pp. 836-839, Detroit, USA, May 1995.
- 61 L.M. Arslan and J.H.L. Hansen. "A Minimum Cost Based Phoneme Class Detector for Improved Iterative Speech Enhancement", IEEE Proc. ICASSP, vol. 2, pp. 045-048, Adelaide, South Australia, April 1994.
- 62 J.H.L. Hansen, B.D. Womack, L.M. Arslan. "A Source Generator Based Production Model for Environmental Robustness in Speech Recognition", ICSLP Proceedings, vol. 3, pp 1003-1006, Yokohama, Japan, 1994.

## Conference Presentations

- 1 L.M. Arslan "Voice Biometrics", Keynote Speech, ASYU 2012, Trabzon, Turkey.
- 2 L.M. Arslan "Challenges in Speech Analytics, SpeechTek Conference, New York, 2012.
- 3 L.M. Arslan "Mühendislikte İnovasyon", Mükemmelliği Arayış Sempozyumu, KALDER, 2012.

## Technical Notes

- 1 O. Sayli, L.M. Arslan "Türkçedeki seslerin süre özellikleri", DilBilim Araştırmaları, Boğaziçi Üniversitesi Yayınevi, İstanbul, 2003.
- 2 Ü. Yapanel, L.M. Arslan "Türkçe için Konuşma Tanıma Uygulamaları", Elektrik-Elektronik Dergisi, No:8, September 1999.

## PhD Theses Supervised

- 1 "Telephone based Text dependent Speaker Verification", Osman Büyük, 2011
- 2 "Cross-Lingual Voice Conversion", Oytun Türk, 2007.

## MS Theses Supervised

- 1 "Fusing Acoustic and Linguistic Parameters for Multilingual Emotion Recognition", Mustafa Erden, 2011
- 2 "Voice Conversion for Reconstruction of Dysphonic Speech", Gönenç Tarakcioğlu, 2010
- 3 "A Unified Approach to Speech Enhancement and Voice Activity Detection", Ceyhan Kasap, 2009.
- 4 "Domain Specific Keyword Spotting", Ali Haznedaroğlu, 2007
- 5 "Improved Handling of SMS Messages with Statistical Natural Language Processing Techniques", Ömer Yıldırım, 2005 (Co-supervisor)
- 6 "Speech and Text Driven 3-D Face Synthesis for the Hearing Impaired", Arman Savran, 2004
- 7 "Turkish Dictation System for Radiology and Broadcast News Applications", Ebru Arisoy, 2004
- 8 "Self Score Normalization and Frame Pruning Techniques for Speaker Verification Systems", Suphi Umut Naci, 2003
- 9 "An Unsupervised Approach for Automatic Language Identification", Tuba İslam, 2003
- 10 "New Methods For Voice Conversion", M.S. Thesis, by Oytun Türk, 2003
- 11 "Statistical Language Models For Large Vocabulary Turkish Speech Recognition", Helin Dutağacı, 2002
- 12 "Duration Analysis And Modelling For Turkish Text-To-Speech Synthesis", Ömer Şayli, 2002
- 13 "Acoustic Feature Analysis For Robust Speech Recognition", Alpay Koç, 2002
- 14 "Fundamental Frequency Contour Synthesis for Turkish Text-to-Speech", Erkan Abdullahbeşe, 2001
- 15 "Keyword Spotting Using Hidden Markov Models", Şevket Duran, 2001
- 16 "Frequency Analysis of Speaker Identification Performance", Özgür Devrim Orman, 2000
- 17 "Garbage Modeling Techniques for a Turkish Keyword Spotting System", Ümit Yapanel, 2000

## Projects Involved

- 1 European Union 6th Framework SIMILAR Network of Excellence Project (Total Budget: ~6.1 million Euros) 2003-2007
- 2 European Union 6th Framework BIOSECURE Network of Excellence Project (Total Budget: ~2 million Euros) 2004-2007,
- 3 Tübitak TEYDEB 3070164 Ses Teknolojileriyle Entegre Yeni Nesil Çağrı Merkezi, SESTEK A.Ş. (2007-2009) (Yönetici)
- 4 European Union EUREKA XML\_FED 3050353 Yaşlılar ve Özürlüler için XML Teknolojisi Projesi, SESTEK A.Ş. (2006-2008)
- 5 European Union EUREKA ELDORO 9090036 - Electronic Doctor's round (2010-2013)
- 6 Tübitak TEYDEB 3100487 CEPTECÜMAN - Otomatik Sesli Mobil Tercüman Sistemi (2010-2011) (Yönetici)
- 7 Tübitak TEYDEB 3120704 Ameliyat Öncesi Sesin Elektronik ortamda sentezlenmesi (2012-2015)
- 8 Tübitak TEYDEB 3090871 Yazılı Yayınlar Telefonla Erişim Hattı, SESTEK A.Ş. (2010-2013) (Yönetici)
- 9 Tübitak TİDEB 3040394 Çağrı Merkezlerinde İnsan-Makine İletişim Sistemleri Tasarımı Projesi, SESTEK A.Ş. (2004-2006)
- 10 European Union EUREKA MAJORCALL Project, GVZ A.Ş. (2003-2005)
- 11 Tübitak TİDEB Türkçe Ses sentezi Sistemi için vurgu modellemesi, GVZ A.Ş. (2000-2003) (Yönetici)
- 12 Tübitak TİDEB 3020035 Dil Bağımsız Otomatik Konuşmacı Dönüştürme Sistemi Geliştirme Projesi, SESTEK A.Ş. (2002-2003)
- 13 Tübitak TİDEB 3040039 Konuşma Terapisi ve Otomatik Ses Kalitesi İzleme Yazılımı Projesi, SESTEK A.Ş. (2004-2006)

## Citations

- 205 Web of Science citations
- 81 Citations from Patents
- 840 Google Scholar Citations (various citations from on-line articles, theses, conference proceedings, etc.)

## Awards and Honours

- Mustafa Parlar Technology Incentive Award, 2006
- TTGV Dr. Akın Çakmakçı Thesis Advisor Award, 2007
- Boğaziçi University, Academic Award
- Research Assistant Fellowship, Duke University (1991 - 1996)
- Prize for 22nd place in nationwide university entrance exam in Turkey (1986).
- Technical achievement award at Texas Instruments (1995).
- Fellowship, Sabanci Foundation, Turkey (1986 – 1991).
- Reviewer for IEEE Transactions on Speech and Audio Processing.
- Reviewer for Speech Communication Journal.
- Reviewer for Signal Processing
- Reviewer for IEEE Signal Processing Letters
- Reviewer for Journal of Acoustical Society of America
- Reviewer for Interspeech 2002, 2003, 2004, 2005, 2007
- Reviewer for SIU 2000-2009
- Reviewer for IEEE ICASSP 2005, 2007, 2008, 2009
- Reviewer for EUSIPCO 2005

## Computer Skills

- Programming languages: C, C++, Pascal, FORTRAN, PROLOG, HTML, C-Shell, Tcl-Tk
- Software Packages: MATLAB, ESPS, WAVES, HTK
- Operating Systems: Unix, Linux, DOS, Windows

## Interests

- Painting, playing the violin, tennis, soccer.