

Yücel YEMEZ (Prof.)

Department of Computer Engineering
Koç University
Rumelifeneri Yolu
34450 Sarıyer, İstanbul, Turkey
Tel: +90 (212) 338-1585
Fax: +90 (212) 338-1548
E-Mail: yyemez@ku.edu.tr



Education

- 1992-1997 : **PhD**, Doctor of Philosophy in Electrical and Electronic Engineering
Boğaziçi University, İstanbul, Turkey
- 1989-1992 : **MS**, Master of Science in Electrical and Electronic Engineering
Boğaziçi University, İstanbul, Turkey
- 1985-1989 : **BS**, Bachelor of Science in Electrical and Electronic Engineering
Middle East Technical University, Ankara, Turkey
- 1982-1985 Ankara Fen Lisesi

Professional Experience

2000 - present: Faculty Member at Koç University, Computer Engineering Department, İstanbul, Turkey.

October 1999 – June 2000: Postdoctoral Researcher at ENST (Télécom ParisTech), Signal and Image Processing Department, Paris, France. Worked for MPEG4-Web3D standardization activities in collaboration with R&D Center of France Telecom (CNET).

September 1997- October 1999: Postdoctoral Fellow at ENST (Télécom ParisTech), Signal and Image Processing Department, Paris, France.

1990-1997: Teaching assistant in Department of Mathematics, Boğaziçi University.

1993-1996: Researcher in BUSIM (Boğaziçi University Signal and Image Processing) Lab, İstanbul, Turkey.

Editorial Activities

2010- present: Associate Editor - Graphical Models, Elsevier.

Research Interests

Computer vision, deep learning, computer graphics, 3D modeling and reconstruction, image processing, biometrics, multimodal signal processing, machine learning.

International Research Collaborations

SIMILAR, European FP6 Network of Excellence on ‘Human-machine interfaces similar to human-human communication’, 2004-2008.

3DTV, European FP6 Network of Excellence on ‘Integrated 3-D Television – Capture, Transmission and Display’, 2004-2008.

Programme of Integrated Actions (PIA), TUBITAK and French Embassy, Collaboration with ENST- Telecom Paris and Bogazici Un., 2004 - 2008.

CAVeNC, Cross-Modal Analysis of Verbal and Non-verbal Communication, European COST, 2007-2011.

JOKER, IUI - JOKe and Empathy of a Robot/ECA: Towards social and affective relations with a robot, European Chist-Era Project, 2013- .

REGROUND - RElational Symbol GROUNDing Through Affordance Learning, European Chist-Era Project, 2016- .

Publications

Journal Papers

- B. B. Turker, Y. Yemez, E. Erzin and M. Sezgin, “Audio-Facial Laughter Detection in Naturalistic Dyadic Conversations,” *IEEE Transactions on Affective Computing*, Vol. 8, No. 4, pp. 534-545, 2017.
- E. Bozkurt, Y. Yemez, and E. Erzin, “Multimodal Analysis of Speech and Arm Motion for Prosody-Driven Synthesis of Beat Gestures”, *Speech Communication*, Vol. 85, pp. 29-42, December 2016.
- E. Bozkurt, H. Khaki, S. Kececi, B. B. Turker, Y. Yemez, E. Erzin, "The JESTKOD Database: An Affective Multimodal Database of Dyadic Interactions", *Language Resources & Evaluation*, Vol. 51, No. 3, pp. 857–872, 2017.
- A. Ünlüer, M. A. Baytaş,, O. T. Buruk, Y. Yemez, Z. Cemalcılar, O. Özcan, "The effectiveness of mime-based creative drama education for exploring gesture-based user interfaces", *The International Journal of Art & Design Education*, Vol. 37, No. 3, pp. 353-366, 2018.
- Y. Sahillioğlu and Y. Yemez, “Multiple Shape Correspondence by Dynamic Programming”, *Computer Graphics Forum, PG’14*, Vol. 33, No. 7, pp. 121-130, 2014.
- Y. Sahillioğlu and Y. Yemez, “Partial 3D Correspondence from Shape Extremities”, *Computer Graphics Forum*, Vol. 33, No. 6, pp. 63-76, 2014.
- Y. Sahillioğlu and Y. Yemez, “Coarse-to-Fine Isometric Shape Correspondence by Tracking Symmetric Flips”, *Computer Graphics Forum*, Vol. 32, No. 1, pp. 177-189, 2013.
- Y. Sahillioğlu and Y. Yemez, "Minimum-Distortion Isometric Shape Correspondence Using EM Algorithm," *IEEE Transactions on Pattern Analysis and Machine Intelligence*, Vol. 34, No. 11, pp. 2203–2215, 2012.
- F. Ofli, E. Erzin, Y. Yemez, A. M. Tekalp, "Learn2Dance: Learning Statistical Music-to-Dance Mappings for Choreography Synthesis," *IEEE Transactions on Multimedia*, Vol. 14, No. 3, pp. 747–759, 2012.
- S. C. Bilir and Y. Yemez, "Non-Rigid 3D Shape Tracking from Multiview Video," *Computer Vision and Image Understanding*, Vol. 116, No. 11, pp. 1121–1134, 2012.
- Y. Sahillioğlu and Y. Yemez, “Scale Normalization for Isometric Shape Matching”, *Computer Graphics Forum, PG’12*, Vol. 31, No. 7, pp. 2233-2240, 2012.

- Y. Sahillioğlu and Y. Yemez, "Coarse-to-Fine Combinatorial Matching for Dense Isometric Shape Correspondence", *Computer Graphics Forum*, Vol. 30, No. 5, pp. 1461-1470, 2011.
- Y. Sahillioğlu and Y. Yemez, "Coarse-to-Fine Surface Reconstruction from Silhouettes and Range Data Using Mesh Deformation," *Computer Vision and Image Understanding*, Vol. 114, No. 3, pp. 334–348, 2010.
- Y. Yemez and Y. Sahillioğlu, "Shape from Silhouette Using Topology-Adaptive Mesh Deformation," *Pattern Recognition Letters*, Vol. 30, pp. 1198–1207, 2009.
- H. Dutağacı, B. Sankur, Y. Yemez, "Subspace methods for retrieval of general 3D models", *Computer Vision and Image Understanding*, Vol. 114, No. 8, pp. 865-886, 2010.
- C. B. Akgül, B. Sankur, Y. Yemez, F. Schmitt, "Similarity Learning for 3D Object Retrieval using Relevance Feedback and Risk Minimization", *International Journal of Computer Vision*, Vol. 89, No. 2-3, pp. 392-407, 2010.
- C. B. Akgül, B. Sankur, Y. Yemez, F. Schmitt, "3D Model Retrieval using Probability Density-Based Shape Descriptors", *IEEE Transactions on Pattern Analysis and Machine Intelligence*, Vol. 31, No. 6, pp. 1117-1133, June 2009.
- M. E. Sargin, Y. Yemez, E. Erzin, and A. M. Tekalp, "Analysis of Head Gesture and Prosody Patterns for Prosody-Driven Head-Gesture Animation," *IEEE Transactions on Pattern Analysis and Machine Intelligence*, Vol. 30, No. 8, pp. 1330-1345, August 2008.
- F. Ofli, C. Canton-Ferrer, Y. Demir, K. Balci, J. Tilmanne, E. Bozkurt, I. Kizoğlu, Y. Yemez, E. Erzin, A. M. Tekalp, L. Akarun, A. T. Erdem, "An Audio-Driven Dancing Avatar," *Journal on Multimodal User Interfaces*, Springer, Vol. 2, No. 2, pp. 93-103, 2008.
- Y. Yemez and C.J. Wetherilt, "A volumetric fusion technique for surface reconstruction from silhouettes and range data," *Computer Vision and Image Understanding*, Vol. 105, No. 1, pp. 30–41, 2007.
- A. A. Alatan, Y. Yemez, U. Güdükbay, X. Zabulis, K. Müller, Ç. Erdem, C. Weigel and A. Smolic, "Scene Representation Technologies for 3DTV - A Survey", *IEEE Transactions on Circuits and Systems for Video Technology*, Vol. 17, No. 11, pp. 1587-1605, 2007.
- M. E. Sargin, Y. Yemez, E. Erzin, and A. M. Tekalp, "Audio-Visual Synchronization and Fusion using Canonical Correlation Analysis," *IEEE Transactions on Multimedia*, Vol. 9, No. 7, pp. 1396-1403, 2007.
- C. B. Akgül, B. Sankur, Y. Yemez, F. Schmitt, "Density-Based 3D Shape Descriptors", *EURASIP Journal on Applied Signal Processing*, Special Issue on Search and Retrieval of 3D Content and Associated Knowledge Extraction and Propagation, Vol. 2007, Article ID 32503, 16 pages, 2007.
- C. B. Akgül, F. Schmitt, B. Sankur, Y. Yemez, "Improving Efficiency of Density-Based Shape Descriptors for 3D Object Retrieval", *Lecture Notes in Computer Science (MIRAGE'07)*, Vol. 4418, pp. 330-340, 2007.
- E. Erzin, Y. Yemez, A. M. Tekalp, A. Erçil, H. Erdoğan, H. Abut, "Multimodal Person Identification for Human Vehicle Interaction," *IEEE Multimedia*, Vol.13 , No. 2 , pp. 18-31, April, 2006.
- H.E. Cetingul, Y. Yemez, E. Erzin, A. M. Tekalp, "Discriminative Analysis of Lip Motion Features for Speaker Identification and Speech-Reading," *IEEE Transactions on Image Processing*, Vol. 15, No. 10, pp. 2879-2891, 2006.
- H.E. Cetingul, E. Erzin, Y. Yemez, A. M. Tekalp, "Multimodal Speaker/Speech Recognition using Lip Motion, Lip Texture and Audio," *Signal Processing (Elsevier)*, Special Issue on Multimodal Human-Computer Interfaces, Vol. 86, No. 12, pp. 3549-3558, 2006.
- Y. Sahillioğlu and Y. Yemez, "A Surface Deformation Framework for 3D Shape Recovery," *Lecture Notes in Computer Science (MCRS'06)*, Vol. 4105, pp. 570-577, 2006.
- C. B. Akgül, B. Sankur, F. Schmitt and Y. Yemez, "Density-Based Shape Descriptors for 3D Object Retrieval," *Lecture Notes in Computer Science (MCRS'06)*, Vol. 4105, pp. 322-329, 2006.

- E. Erzin, Y. Yemez, A. M. Tekalp, "Multimodal speaker identification using an adaptive classifier cascade based on modality reliability," *IEEE Transactions on Multimedia*, Vol. 7, No. 5, pp. 840- 852, 2005.
- Y. Yemez and F. Schmitt, "3D reconstruction of real objects with high resolution shape and texture," *Image and Vision Computing*, Vol. 22, No. 13, pp. 1137-1153, 2004.
- Y. Yemez and F. Schmitt, "Multilevel Representation and Transmission of Real Objects with Progressive Octree Particles," *IEEE Trans. on Visualization and Computer Graphics*, Vol. 9, No. 4, pp. 551-569, October 2003.
- Y. Yemez, B. Sankur, E. Anarim, "A quadratic motion-based object-oriented video codec", *Signal Processing: Image Communication*, Vol. 15, No. 9, pp. 729-766, 2000.
- T. Aydin, Y. Yemez, E. Anarim, B. Sankur, "Multidirectional and multiscale edge detection via m-band wavelet transform", *IEEE Trans. on Image Processing*, Vol. 5, No. 9, pp. 1370-1376, September 1996.
- Y. Yemez, E. Anarim, and Y. Isteftanopoulos, "Causal and semicausal AR image model identification using EM algorithm", *IEEE Trans. on Image Processing*, Vol. 2, No. 1, pp. 513-518, October 1993.

Conference papers

- L. Devillers et al., "Multifaceted engagement in social interaction with a machine: The JOKER Project", *IEEE International Conference on Automatic Face and Gesture Recognition*, China, 2018.
- B. B. Turker, E. Erzin, Y. Yemez and M. Sezgin, "Audio-Visual Prediction of Head-Nod and Turn-Taking Events in Dyadic Interactions," in *INTERSPEECH: Annual Conference of the International Speech Communication Association*, Hyderabad, India, 2018.
- B. B. Turker, M. Sezgin, Y. Yemez, and E. Erzin, "Multimodal prediction of head nods in dyadic conversations", *IEEE Signal Processing and Communications Applications Conference (SIU)*, Izmir, Turkey, 2018.
- E. E. Yurdakul, Y. Yemez, "Semantic Segmentation of RGBD Videos with Recurrent Fully Convolutional Neural Networks," *ICCV Workshop - Multi-Sensor Fusion for Dynamic Scene Understanding (MSF'17)*, Venice, Italy, Oct. 2017.
- S. Zia, B. Yüksel, D. Yüret, Y. Yemez, "RGB-D Object Recognition Using Deep Convolutional Neural Networks," *ICCV Workshop - Geometry Meets Deep Learning*, Venice, Italy, Oct. 2017.
- E. Küpcü and Y. Yemez, " Reliable Isometric Point Correspondence from Depth," *ICCV Workshop - Image-based Modeling of Articulated and Deformable Objects (IMADO)*, Venice, Italy, Oct. 2017.
- B. B. Turker, Z. Bucinca, E. Erzin, Y. Yemez and M. Sezgin, "Analysis of Engagement and User Experience with a Laughter Responsive Social Robot," in *INTERSPEECH: Annual Conference of the International Speech Communication Association*, Stockholm, Sweden, 2017.
- B. B. Turker, Z. Bucinca, E. Erzin, Y. Yemez, and M. Sezgin, "Real-time Audiovisual Laughter Detection", *IEEE Signal Processing and Communications Applications Conference (SIU)*, Antalya, Turkey, 2017.
- E. Bozkurt, E. Erzin, and Y. Yemez, "Affect-expressive hand gestures synthesis and animation," *IEEE Multimedia and Expo (ICME)*, 2015.
- L. Devillers et al., "Multimodal Data Collection of Human-Robot Humorous Interactions in the JOKER Project", *Affective Computing and Intelligent Interaction (ACII)*, Xian, China, 2015.
- B. B. Turker, S. Marzban, M. T. Sezgin, Y. Yemez, and E. Erzin, "Affect burst detection using multimodal cues," *IEEE Signal Processing and Communications Applications Conference (SIU)*, pp. 1006-1009, 2015.

- E. Bozkurt, H. Khaki, S. Kececi, B. B. Turker, Y. Yemez, and E. Erzin, "JESTKOD database: Dyadic interaction analysis," *IEEE Signal Processing and Communications Applications Conference (SIU)*, pp. 1374-1377, 2015.
- Y. Sahillioğlu and Y. Yemez, "Multiple Shape Correspondence by Dynamic Programming", *Pacific Graphics (PG)*, Seoul, October 2014.
- E. Bozkurt, E. Erzin, and Y. Yemez. "Affect-expressive hand gestures synthesis and animation." *Multimedia and Expo (ICME), 2015 IEEE International Conference on*. IEEE, 2015.
- B. B. Türker, S. Marzban, E. Erzin, Y. Yemez, T. M. Sezgin, "Affect Burst Recognition Using Multi-Modal Cues", *IEEE Signal Processing and Communications Applications (SIU)*, Trabzon, April 2014.
- A. M. Baytaş, Y. Yemez, O. Ozcan, "User Interface Paradigms for Visually Authoring Mid-Air Gestures: A Survey and a Provocation", *ACM SIGCHI Symposium on Engineering Interactive Computing Systems (EICS'14)*, Rome, June, 2014.
- A. M. Baytaş, Y. Yemez, O. Ozcan, "Hotspotizer: End-user Authoring of Mid-air Gestural Interactions", *Proceedings of the 8th Nordic Conference on Human-Computer Interaction: Fun, Fast, Foundational, NordiCHI '14*, Helsinki, October, 2014.
- E. Bozkurt, S. Asta, S. Özkul, Y. Yemez, and E. Erzin, "Multimodal analysis of speech prosody and upper body gestures using hidden semi-Markov models," *IEEE Int. Conf. on Acoustics, Speech, and Signal Processing (ICASSP)*, Vancouver, Canada, 2013.
- E. Bozkurt, Y. Yemez, and E. Erzin, "Speech rhythm-driven gesture animation," *IEEE Signal Processing and Communications Applications (SIU)*, Northern Cyprus, April 2013.
- Y. Sahillioğlu and Y. Yemez, "Scale Normalization for Isometric Shape Matching", *Pacific Graphics (PG)*, Hong Kong, September 2012.
- S. Özkul, E. Bozkurt, S. Asta, Y. Yemez, and E. Erzin, "Multimodal analysis of upper-body gestures, facial expressions and speech," *Int. Workshop on Corpora for Research on Emotion Sentiment & Social Signals*, İstanbul, May 2012.
- Y. Sahillioğlu and Y. Yemez, "Coarse-to-Fine Combinatorial Matching for Dense Isometric Shape Correspondence", *Symposium on Geometry Processing (SGP)*, Lausanne, July 2011.
- F. Ofli, E. Erzin, Y. Yemez and A.M. Tekalp, "Multimodal dance choreography model", *IEEE Signal Processing and Communications Applications (SIU)*, pp. 126-129, Antalya, April 2011.
- Y. Sahillioğlu and Y. Yemez, "3D Shape Correspondence by Isometry-Driven Greedy Optimization," *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, pp. 453 – 458, San Francisco, June 2010.
- E. Kalafatlar and Y. Yemez, "3D Articulated Shape Segmentation Using Motion Information," *Int. Cof. on Pattern Recognition (ICPR)*, Istanbul, August 2010.
- F. Ofli, E. Erzin, Y. Yemez, and A.M. Tekalp, "Multi-modal analysis of dance performances for music-driven choreography synthesis," *IEEE Int. Conf. on Acoustics, Speech, and Signal Processing (ICASSP)*, Dallas, USA, 2010.
- C. B. Akgül, B. Sankur, Y. Yemez, "Correspondence-Free Alignment of 3D Object Models", *Conference on Three-Dimensional Image Processing (3DIP) and Applications*, San Jose, CA, Jan 2010.
- H. Dutağacı, B. Sankur and Y. Yemez, "View subspaces for indexing and retrieval of 3D models", *Conference on Three-Dimensional Image Processing (3DIP) and Applications*, San Jose, CA, Jan 2010.
- Y. Sahillioğlu and Y. Yemez, "Isometric 3D Shape Correspondence," *IEEE Signal Processing and Communications Applications (SIU)*, Diyarbakır, April 2010.

- C. Akgül, A. Axenopoulos, B. Bustos, M. Chaouch, P. Daras, H. Dutagaci, T. Furuya, A. Godil, S. Kreft, Z. Lian, T. Napoléon, A. Mademlis, R. Ohbuchi, P. L. Rosin, B. Sankur, T. Schreck, X. Sun, M. Tezuka, Y. Yemez, A. Verroust-Blondet and M. Walter, "SHREC 2009 – Generic Shape Retrieval Contest", *Proc. of the Eurographics Workshop on 3D Object Retrieval*, Munich, Germany, March 2009.
- H. Dutagaci, B. Sankur and Y. Yemez, "Subspace-based techniques for retrieval of general 3D models", *IEEE 17th Signal Processing and Communications Applications (SIU)*, Antalya, April 2009.
- S. C. Bilir and Y. Yemez, "Time Varying Surface Reconstruction from Multiview Video," *IEEE Int. Conf. on Shape Modeling and Applications, SMI'08*, New York, USA, June 2008.
- C. B. Akgül, B. Sankur, Y. Yemez, F. Schmitt, "Similarity Score Fusion by Ranking Risk Minimization for 3D Object Retrieval", *Eurographics Workshop on 3D Object Retrieval, Proc. of the Eurographics Workshop on 3D Object Retrieval*, Crete, Greece, April 2008.
- F. Ofli, E. Erzin, Y. Yemez, A. M. Tekalp, C. E. Erdem, A. T. Erdem, T. Abaci, M. K. Ozkan, "Unsupervised Dance Figure Analysis from Video for Dancing Avatar Animation", *IEEE Int. Conf. on Image Processing (ICIP'08)*, San Diego, California, U.S.A., October 2008.
- F. Ofli, C. Canton-Ferrer, J. Tilmanne, Y. Demir, E. Bozkurt, Y. Yemez, E. Erzin, A. M. Tekalp, "Audio-Driven Human Body Motion Analysis and Synthesis," *IEEE Int. Conf. on Acoustics, Speech, and Signal Processing (ICASSP'08)*, pp. 2233 – 2236, Las Vegas, USA, April 2008.
- Y. Demir, E. Erzin, Y. Yemez, A. M. Tekalp, "Evaluation of Audio Features for Audio-Visual Analysis of Dance Figures, " *European Signal Processing Conference (EUSIPCO'08)*, Lausanne, August 2008.
- C. B. Akgül, B. Sankur, Y. Yemez, "Statistical Score Fusion for 3D Object Retrieval", *IEEE 16th Signal Processing and Communications Applications (SIU)*, Didim, April 2008.
- S. C. Bilir and Y. Yemez, "Çok-Baklı Video Dizilerinden Zamanla Değişen Yüzey Geriçatımı", *IEEE 16th Signal Processing and Communications Applications (SIU)*, Didim, April 2008.
- F. Ofli, Y. Demir, C. Canton-Ferrer, J. Tilmanne, K. Balci, E. Bozkurt, İ. Kızoğlu, Y. Yemez, E. Erzin, A. M. Tekalp, L. Akarun, A. T. Erdem, "Analysis and Synthesis of Multiview Audio-Visual Dance Figures", *IEEE 16th Signal Processing and Communications Applications (SIU)*, Didim, April 2008.
- F. Ofli, C. Canton-Ferrer, Y. Demir, K. Balci, J. Tilmanne, E. Bozkurt, I. Kizoglu, Y. Yemez, E. Erzin, A. M. Tekalp, L. Akarun, A. T. Erdem, "Audio-Driven Human Body Motion Analysis and Synthesis", *Proc. of the eINTERFACE'07: The SIMILAR NoE Summer Workshop on Multimodal Interfaces*, Istanbul, Turkey, July-August 2007.
- M.E. Sargin, E. Erzin, Y. Yemez, A. M. Tekalp, A. T. Erdem, C. Erdem, M. Ozkan, "Prosody-Driven Head-Gesture Animation, " *IEEE Int. Conf. on Acoustics, Speech and Signal Processing*, pp. II-677 - II-680, Honolulu, USA, 2007.
- C. B. Akgul, B. Sankur, F. Schmitt, Y. Yemez, "Multivariate Density-Based 3D Shape Descriptors," *IEEE Int. Conf. on Shape Modeling and Applications, SMI'07*, pp. 3-12, Lyon, France, 2007.
- F. Ofli, Y. Demir, E. Erzin, Y. Yemez, and A. M. Tekalp, "Multicamera Audio-Visual Analysis of Dance Figures," *IEEE Int. Conf. on Multimedia and Expo ICME'07*, pp. 1703-1706, Beijing, China, 2007.
- C. B. Akgül, F. Schmitt, B. Sankur, Y. Yemez, "Multivariate Density-Based 3D Shape Descriptors", *Proceedings of SHREC'07*, Lyon, France, 2007.
- C. B. Akgül, F. Schmitt, B. Sankur, Y. Yemez, "Improving Efficiency of Density-Based Shape Descriptors for 3D Object Retrieval", *Computer Vision / Computer Graphics Collaboration Techniques (MIRAGE'07)*, Springer LNCS Series, vol. 4418, pp. 330-340, INRIA Rocquencourt, France, 2007.

- F. Ofli, Y. Demir, E. Erzin, Y. Yemez, A. M. Tekalp, "Multicamera Audio-Visual Analysis of Dance Figures Using Segmented Body Model," *European Signal Processing Conference (EUSIPCO'07)*, Poznan, Poland, 2007.
- F. Ofli, E. Erzin, Y. Yemez, A. M. Tekalp, "Estimation and Analysis of Facial Animation Parameter Patterns," *IEEE Int. Conf. on Image Processing (ICIP'07)*, San Antonio, 2007.
- F. Ofli, Y. Demir, E. Erzin, Y. Yemez, and A. M. Tekalp, "Joint Correlation Analysis of Audio-Visual Dance Figures," *IEEE Signal Processing and Communications Applications SIU'07*, 2007.
- F. Ofli, E. Erzin, Y. Yemez, and A. M. Tekalp, "Estimation of Personalized Facial Gesture Patterns," *IEEE Signal Processing and Communications Applications SIU'07*, 2007.
- C. B. Akgül, B. Sankur, F. Schmitt, Y. Yemez, "Feature-Level and Descriptor-Level Information Fusion for Density-Based 3D Shape Descriptors," *IEEE Signal Processing and Communications Applications SIU'07*, 2007.
- M.E. Sargin, O. Aran, A. Karpov, F. Ofli, Y. Yasinnik, S. Wilson, E. Erzin, Y. Yemez and A.M. Tekalp "Combined Gesture-Speech Analysis and Speech Driven Gesture Synthesis," *IEEE Int. Conf. on Multimedia Expo ICME'06*, Toronto, 2006.
- M.E. Sargin, E. Erzin, Y. Yemez and A.M. Tekalp, "Multimodal Speaker Identification using Canonical Correlation Analysis," *ICASSP '06*, vol. I, pp. 613-616, May, Toulouse, France, 2006.
- C. B. Akgül, B. Sankur, Y. Yemez, F. Schmitt, "A Framework for Histogram-Induced 3D Descriptors", *Proc. of the 14th European Signal Processing Conference (EUSIPCO'06)*, Florence, Italy, September 4-8, 2006.
- Y. Sahillioğlu and Y. Yemez, "A Surface Deformation Framework for 3D Shape Recovery," *Lecture Notes in Computer Science (MCRS'06)*, Vol. 4105, pp. 570-577, 2006.
- C. B. Akgül, B. Sankur, F. Schmitt and Y. Yemez, "Density-Based Shape Descriptors for 3D Object Retrieval," *Lecture Notes in Computer Science (MCRS'06)*, Vol. 4105, pp. 322-329, 2006.
- H. Dutagaci, B. Sankur, Y. Yemez, "A comparison of data representation types, features types and fusion techniques for 3D face biometry", *14th European Signal Processing Conference EUSIPCO'06*, Florence, Italy, September 2006.
- H. Dutagaci, B. Sankur, Y. Yemez, "3D Face recognition by projection-based features", *SPIE Electronic Imaging Conference: Security, Steganography, and Watermarking of Multimedia Contents VIII*, pp. 15-19 January 2006, San Jose, USA.
- M.E. Sargin, E. Erzin, Y. Yemez, A.M. Tekalp, A.T. Erdem " Speech Driven 3D Head Gesture Synthesis," *IEEE 14th Signal Processing and Communications Applications (SIU)*, Antalya, Turkey, April 2006.
- H. Dutagaci, B. Sankur, Y. Yemez, "3D Face Recognition", *IEEE 14th Signal Processing and Communications Applications (SIU)*, Antalya, Turkey, April 2006.
- C. B. Akgül, B. Sankur, F. Schmitt, Y. Yemez, "A New Framework for 3D Shape Descriptors", *IEEE 14th Signal Processing and Communications Applications (SIU)*, Antalya, Turkey, April 2006.
- Y. Sahillioğlu, Y. Yemez, V. Skala, "3D Shape Recovery and Tracking from Multi-Camera Video Sequences via Surface Deformation", *IEEE 14th Signal Processing and Communications Applications (SIU)*, Antalya, Turkey, April 2006.
- H. Dutagaci, B. Sankur, Y. Yemez, "Transform-based Methods for Indexing and Retrieval of 3D Objects", *Proceedings of Int. Conf. on 3D Digital Imaging and Modeling 3DIM*, Ottawa, October 2005.
- M.E. Sargin, E. Erzin, Y. Yemez, A.M. Tekalp "Lip Feature Extraction based on Audio-Visual Correlation," *EUSIPCO 2005*, Antalya, Turkey.

- B. Tari, Y. Yemez, Ö. Özkasap, R. Civanlar, " Progressive View-Dependent Transmission of 3D Models over Lossy Networks ", *EUSIPCO-2005*, Antalya, Turkey.
- H.E. Cetingul, Y. Yemez, E. Erzin, A. M. Tekalp "Robust Lip-Motion Features For Speaker Identification," *IEEE Int. Conf. on Acoustic, Speech and Signal Processing*, Philadelphia, March 2005.
- H.E. Cetingul, E. Erzin, Y. Yemez, A. M. Tekalp "Use of Lip Information for Robust Speaker Identification and Speech Recognition," *Biennial on DSP for In-Vehicle and Mobile Systems*, Sesimbra, Portugal, September 2-3, 2005.
- C. B. Akgül, B. Sankur, F. Schmitt, Y. Yemez, "3D Object Matching via Multivariate Shape Distributions", *IEEE 13th Signal Processing and Communications Applications (SIU)*, Kayseri, Turkey, May 2005.
- H. Dutağacı, B. Sankur, Y. Yemez, "3B Nesnelerin Endekslenmesi Ve Erişimi İçin Dönüşüm Tabanlı Yöntemler," *IEEE 13th Signal Processing and Communications Applications (SIU)*, Kayseri, Turkey, May 2005.
- M. E. Sargin, Y. Yemez, E. Erzin, A. M. Tekalp "Görsel-İşitsel İlintiye Dayalı Dudak Öz nitelik Çıkarımı," *IEEE 13th Signal Processing and Communications Applications (SIU)*, Kayseri, Turkey, May 2005.
- E. Cetingul, Y. Yemez, E. Erzin, A. M. Tekalp "Konuşmacı Tanıma İçin Karşılaştırmalı Dudak Devinim Analizi," *IEEE 13th Signal Processing and Communications Applications (SIU)*, Kayseri, Turkey, May 2005.
- E. Cetingul, Y. Yemez, E. Erzin , A. M. Tekalp, "Discriminative Lip-Motion Features for Biometric Speaker Identification", *IEEE Int. Conf. on Image Process. ICIP'2004*, Singapore, 2004.
- E. Cetingul, E. Erzin, Y. Yemez, and A. M. Tekalp, "On Optimal Selection of Lip-Motion Features for Speaker Identification", *IEEE International Workshop on Multimedia Signal Processing (MMSP04)*, September 2004, Siena, Italy.
- E. Erzin, Y. Yemez, A. Murat Tekalp, "Adaptive Classifier Cascade for Multimodal Speaker Identification," in *INTERSPEECH 2004 – ICSLP*, Korea.
- E. Erzin, Y. Yemez, A. M. Tekalp, ``Multimodal Audio-Visual Speaker Identification," *Special Workshop in MAUI (SWIM): Lectures by Masters in Speech Processing*, Maui, Hawaii, January 12-14, 2004.
- E. Cetingul, Y. Yemez, E. Erzin, and A. M. Tekalp, "The Use of Lip-Motion For Biometric Speaker Identification", 12th IEEE Conference on Signal Processing, Communications and Applications (SIU04), April 2004, Kuşadası, Aydın, Turkey.
- A. Kanak, E. Erzin, Y. Yemez and A. M. Tekalp, "Joint Audio-Video Processing for Robust Biometric Speaker Identification in Car," *Workshop on DSP in Mobile and Vehicular Systems*, Nagoya, Japan, April 3-4, 2003.
- Y. Yemez and F. Schmitt, "3D progressive compression with octree particles," *Proceedings of VMV'2002 Vision, Modeling and Visualization*, pp. 139-146, Erlangen, Germany, November 2002.
- Y. Yemez, A. Kanak, E. Erzin, and A. M. Tekalp, "Multimodal speaker identification with audio-video processing," *IEEE Int. Conf. on Image Process. ICIP'03*, Barcelona, Spain, September 2003.
- A. Kanak, E. Erzin, Y. Yemez and A. M. Tekalp, "Joint Audio-Video Processing for Biometric Speaker Identification," *Int. Conf. on IEEE Acoustic, Speech and Signal Processing*, Hong Kong, China, April 2003.
- C. Hernandez, Y. Yemez and F. Schmitt, "3D Reconstruction of Real Objects from silhouettes and stereo," *Pattern Recognition and Computer Vision Colloquium*, Prague, Czech Republic, 2001.
- Y. Yemez and F. Schmitt, "Modélisation Progressive Multiniveaux d'Objets 3D par particules," *RFIA'2000, 12ème Congrès Francophone AFRIF-AFIA de Reconnaissance des Formes et Intelligence Artificielle*, Paris, France, February 2000.

- F. Schmitt and Y. Yemez, "3D color object reconstruction from 2D image sequences," *IEEE Int. Conf. on Image Process. ICIP'99*, pp. 102-106, Kobe, Japan, October 1999.
- Y. Yemez and F. Schmitt, "Progressive 3D meshes from octree particles," *Proceedings of Int. Conf. on 3D Digital Imaging and Modeling 3DIM'99*, pp. 290-299, Ottawa, Canada, October 1999.
- Müläyim, A.Y., Yemez, Y., Schmitt, F., Atalay, V. "Rotation axis extraction of a turn table viewed by a fixed camera ", *Vision Modelling and Visualisation VMV'99*, Erlangen, Germany, November 17-19, 1999.
- Y. Yemez, B. Sankur, E. Anarim, "An object-oriented video codec based on region growing motion segmentation", *IEEE Int. Conf. on Image Process. ICIP'97*, pp. 444-447, U.S.A., November 1997.
- Y. Yemez, B. Sankur, E. Anarim, "Region growing motion segmentation and estimation in object-oriented video coding", *IEEE Int. Conf. on Image Process. ICIP'96*, Vol.2, pp. 521-524, Lausanne-Switzerland, September 1996.
- Y. Yemez, T. Aydin, B. Sankur, E. Anarim, "A new approach to 3-D face modeling", *European Conf. on Circuit Theory and Design ECCTD'95*, pp. 343-346, Istanbul, Turkey, August, 1995.
- T. Aydin, Y. Yemez, B. Sankur, E. Anarim, and O. Alkin, "Use of M-band wavelet transform for multidimensional and multiscale edge detection", *Int. Conf. on IEEE Acoustic, Speech and Signal Processing*, pp. V.17-V.20, Australia, April 1994.
- E. Anarim, Y. Yemez, and Y. Istefanopoulos, "Restoration and identification of images in DFT domain using EM algorithm", *European Conf. on Circuit Theory and Design ECCTD'93*, Davos, Switzerland, August 1993.
- T. Aydin, Y. Yemez, B. Sankur, E. Anarim, O. Alkin, "Edge detection by M-band wavelet transform", *8'th IEEE Conf. on Multidimensional Signal Processing*, pp. 192-193, France, Sept. 1993.

Book chapters

- E. Erzin, Y. Yemez, A. M. Tekalp, *DSP in mobile and vehicular systems*, Chapter: 16, "Joint Audio-Video Processing for Robust Biometric Speaker Identification in Car," Kluwer Academic Publishers, May 2004.
- H. E. Cetingul, E. Erzin, Y. Yemez, A. M. Tekalp, *Visual Speech Recognition: Lip Segmentation and Mapping*, "Multimodal Speaker Identification and Speech Reading using Discriminative Lip Motion Features," IGI Global, 2009.