

IEEE Signal Processing Society
Best Paper Award
(formerly known as the Senior Award)

Honors the author(s) of a paper of exceptional merit dealing with a subject related to the Society's technical scope, and appearing in one of the Society's transactions, irrespective of the author's age.

Audio and Acoustic Signal Processing	
2014	Alexey Ozerov , and Cédric Févotte , for the paper entitled, Multichannel Nonnegative Matrix Factorization in Convolutional Mixtures for Audio Source Separation, <i>IEEE Transactions on Audio, Speech, and Language Processing</i> , Volume 18, Number 3, March 2010.
2012	Tuomas Virtanen , for the paper entitled, Monaural Sound Source Separation by Nonnegative Matrix Factorization with Temporal Continuity and Sparse Criteria, <i>IEEE Transactions on Audio, Speech, and Language Processing</i> , Volume 15, Number 3, March 2007.
2008	Jingdong Chen , Jacob Benesty , Yiteng Huang , and Simon Doclo , for the paper entitled, New Insights Into the Noise Reduction Wiener Filter, <i>IEEE Transactions on Audio, Speech, and Language Processing</i> , Volume 14, Number 4, July 2006.
2007	Ashish Aggarwal , Shankar L. Regunathan and Kenneth Rose , for the paper entitled, Efficient Bit-Rate Scalability for Weighted Squared Error Optimization in Audio Coding, <i>IEEE Transactions on Audio, Speech, and Language Processing</i> , Volume 14, Number 4, July 2006.
2006	Gerald D. T. Schuller , Bin Yu , Dawei Huang , and Bernd Edler for the paper entitled, Perceptual Audio Coding Using Adaptive Pre- and Post-Filters and Lossless Compression, <i>Transactions on Speech and Audio Processing</i> , Volume 10, Number 6, September 2002.
2002	Scott C. Douglas , for the paper entitled, Fast Implementations of the Filtered-X LMS and LMS Algorithms for Multichannel Active Noise Control, <i>IEEE Transactions on Speech and Audio Processing</i> , Volume 7, Number 4, July 1999.
2001	Jacob Benesty , Dennis R. Morgan and Man Mohan Sondhi , for the paper entitled, A Better Understanding and an Improved Solution to the Specific Problems of Stereophonic Acoustic Echo Cancellation, <i>IEEE Transactions on Speech and Audio Processing</i> , Volume 6, Number 2, March 1998.
1988	Y. Kaneda , M. Miyoshi .
Bio Imaging and Signal Processing	
2015	Chunming Li , Chenyang Xu , Changfeng Gui , and Martin D. Fox , for the paper entitled, Distance Regularized Level Set Evolution and Its Application to Image Segmentation, <i>IEEE Transactions on Image Processing</i> , Volume 19, Number 12, December 2010.
2013	Chunming Li , Chiu-Yen Kao , John C. Gore , and Zhaohua Ding , Minimization of Region-Scalable Fitting Energy for Image Segmentation, <i>IEEE Transactions on Image Processing</i> , Volume 17, Number 10, October 2008.
2006	Dinggang Shen and Christos Davatzikos , for the paper entitled, HAMMER: Hierarchical Attribute Matching Mechanism for Elastic Registration, <i>IEEE Transactions on Medical Imaging</i> , Volume 21, Number 11, November 2002.

Digital Signal Processing	
1996	Balas K. Natarajan, for the paper entitled, Filtering Random Noise from Deterministic Signals via Data Compression, <i>IEEE Transactions on Signal Processing</i> , Volume 43, Number 11, November 1995.
1994	Petros Maragos, James F. Kaiser and Thomas F. Quatieri, for the paper entitled, Energy Separation in Signal Modulations with Application to Speech Analysis, <i>IEEE Transactions on Signal Processing</i> , Volume 41, Number 10, October 1993.
1991	Martin Vetterli and Didier Le Gall for the paper entitled, Perfect Reconstruction FIR Filter Banks: Some Properties and Factorizations, <i>IEEE Transactions on Acoustics, Speech, and Signal Processing</i> , Volume 37, Number 7, July 1989.
1989	J. A. Cadzow.
1988	P. P. Vaidyanathan.
1987	Y. Bresler, A. Macovsk.
Image (Video) and Multidimensional Signal Processing	
2010	Hiroyuki Takeda, Sina Farsiu and Peyman Milanfar, for the paper entitled, Kernel Regression for Image Processing and Reconstruction <i>IEEE Transactions on Image Processing</i> , Volume 16, Number 2, February 2007.
2009	Zhou Wang, Alan Conrad Bovik, Hamid Rahim Sheikh, and Eero P. Simoncelli, for the paper entitled, Image Quality Assessment: From Error Visibility to Structural Similarity, <i>IEEE Transactions on Image Processing</i> , Volume 13, Number 4, April 2004.
2008	Javier Portilla, Vasily Strela, Martin J. Wainwright, and Eero P. Simoncelli, for the paper entitled, Image Denoising Using Scale Mixtures of Gaussians in the Wavelet Domain, <i>IEEE Transactions on Image Processing</i> , Volume 12, Number 11, November 2003.
2004	Kenneth Rose and Shankar L. Regunathan, for the paper entitled, Toward Optimality in Scalable Predictive Coding, <i>IEEE Transactions on Image Processing</i> , Volume 10, Number 7, July 2001.
2003	Tony F. Chan and Luminita A. Vese, for the paper entitled, Active Contours Without Edges, <i>IEEE Transactions on Image Processing</i> , Volume 10, Number 2, February 2001.
2001	David Taubman, for the paper entitled, High Performance Scalable Image Compression with EBCOT, <i>IEEE Transactions on Image Processing</i> , Volume 9, Number 7, July 2000.
1999	Ingemar J. Cox, Joe Kilian, F. Thompson Leighton and Talal Shamoan, for the paper entitled, Secure Spread Spectrum Watermarking for Multimedia, <i>IEEE Transactions on Image Processing</i> , Volume 6, Number 12, December 1997.
1998	A. Said and W. A. Pearlman, for the paper entitled, An Image Multiresolution Representation for Lossless and Lossy Compression, <i>IEEE Transactions on Image Processing</i> , Volume 5, Number 9, September 1996.
1997	Pierre Moulin, for the paper entitled, A Multiscale Relaxation Algorithm for SNR Maximization in Nonorthogonal Subband Coding, <i>IEEE Transactions on Image Processing</i> , Volume 4, Number 9, September 1995.

1996	Kannan Ramchandran and Martin Vetterli , for the paper entitled, Best Wavelet Packet Bases in a Rate-Distortion Sense, <i>IEEE Transactions on Image Processing</i> , Volume 2, Number 2, April 1993.
1995	Michael Unser, Akram Aldroubi and Murray Eden , for the paper entitled, B-Spline Signal Processing: Part I - Theory, <i>IEEE Transactions on Signal Processing</i> , Volume 41, Number 2, February 1993.
1993	Arnaud E. Jacquin , for the paper entitled, Image Coding Based on a Fractal Theory of Iterated Contractive Image Transformations, <i>IEEE Transactions on Image Processing</i> , Volume 1, Number 1, January 1992.
1992	Henrique S. Malvar and David H. Staelin , for the paper entitled, The LOT: Transform Coding Without Blocking Effects, <i>IEEE Transactions on Acoustics, Speech, and Signal Processing</i> , Volume 37, Number 4, April 1989.
1991	Mark J. T. Smith and Steven L. Eddins , for the paper entitled, Analysis/Synthesis Techniques for Subband Image Coding, <i>IEEE Transactions on Acoustics, Speech and Signal Processing</i> , Volume 38, Number 8, August 1990.
Individual Nominations	
2015	Junil Choi, David J. Love, and Patrick Bidigare , for the paper entitled, Downlink Training Techniques for FDD Massive MIMO Systems: Open-Loop and Closed-Loop Training With Memory, <i>IEEE Journal of Selected Topics in Signal Processing</i> , Volume 8, Number 5, October 2014.
2014	Namrata Vaswani, and Wei Lu , for the paper entitled, Modified-CS: Modifying Compressive Sensing for Problems With Partially Known Support, <i>IEEE Transactions on Signal Processing</i> , Volume 58, Number 9, September 2010.
	Hiroshi Sawada, Shoko Araki and Shoji Makino , for the paper entitled, Underdetermined Convolutional Blind Source Separation via Frequency Bin-Wise Clustering and Permutation Alignment, <i>IEEE Transactions on Audio, Speech, and Language Processing</i> , Volume 19, Number 3, March 2011.
	Rony Ferzli, and Lina J. Karam , for the paper entitled, A No-Reference Objective Image Sharpness Metric Based on the Notion of Just Noticeable Blur (JNB), <i>IEEE Transactions on Image Processing</i> , Volume 18, Number 4, April 2009.
2013	Federico S. Cattivelli, and Ali H. Sayed , for the paper entitled, Diffusion LMS Strategies for Distributed Estimation, <i>IEEE Transactions on Signal Processing</i> , Volume 58, Number 3, March 2010.
	Amir Beck, Petre Stoica and Jian Li , for the paper entitled, Exact and Approximate Solutions of Source Localization Problems, <i>IEEE Transactions on Signal Processing</i> , Volume 56, Number 5, May 2008.
2012	George Dahl, Dong Yu, Li Deng, and Alex Acero , for the paper entitled, Context-Dependent Pre-Trained Deep Neural Networks for Large-Vocabulary Speech Recognition, <i>IEEE Transactions on Audio, Speech, and Language Processing</i> , Volume 20, Number 1, January 2012.
	Zhi Quan, Shuguang Cui, and Ali H. Sayed , for the paper entitled, Optimal Linear Cooperation for Spectrum Sensing in Cognitive Radio Networks <i>IEEE Journal of Selected Topics in Signal Processing</i> , Volume 2, Number 1, February 2008.

Information Forensics and Security

2015	<p>Xiaoyang Tan and Bill Triggs, for the paper entitled, Enhanced Local Texture Feature Sets for Face Recognition Under Difficult Lighting Conditions, <i>IEEE Transactions on Image Processing</i>, Volume 19, Number 6, June 2010.</p> <p>Tomás Pevný, Patrick Bas, and Jessica Fridrich, for the paper entitled, Steganalysis by Subtractive Pixel Adjacency Matrix, <i>IEEE Transactions on Information Forensics and Security</i>, Volume 5, Number 2, June 2010.</p>
2012	<p>Robert Wilson, David Tse, and Robert A. Scholtz, for the paper entitled, Channel Identification: Secret Sharing Using Reciprocity in Ultrawideband Channels <i>IEEE Transactions on Information Forensics and Security</i>, Volume 2, Number 3, September 2007.</p> <p>Yagiz Sutcu, Qiming Li, and Nasir Memon, for the paper entitled, Protecting Biometric Templates with Sketch: Theory and Practice <i>IEEE Transactions on Information Forensics and Security</i>, Volume 2, Number 3, September 2007.</p>
2011	<p>Tanya Ignatenko and Frans M. J. Willems, for the paper entitled, Biometric Systems: Privacy and Secrecy Aspects, <i>IEEE Transactions on Information Forensics and Security</i>, Volume 4, Number 4, December 2009.</p>
2010	<p>Siwei Lyu and Hany Farid, for the paper entitled, Steganalysis Using Higher-Order Image Statistics <i>IEEE Transactions on Information Forensics and Security</i>, Volume 1, Number 1, March 2006.</p>
2009	<p>Jan Lukáš, Jessica Fridrich, and Miroslav Goljan, for the paper entitled, Digital Camera Identification From Sensor Pattern Noise, <i>IEEE Transactions on Information Forensics and Security</i>, Volume 1, Number 2, June 2006.</p>

Machine Learning for Signal Processing (formerly known as Neural Networks for Signal Processing)

2013	<p>George Dahl, Dong Yu, Li Deng, and Alex Acero, for the paper entitled, Context-Dependent Pre-Trained Deep Neural Networks for Large-Vocabulary Speech Recognition, <i>IEEE Transactions on Audio, Speech, and Language Processing</i>, Volume 20, Number 1, January 2012.</p>
2010	<p>Tülay Adalı, Hualiang Li, Mike Novey and Jean-François Cardoso, for the paper entitled, Complex ICA Using Nonlinear Functions <i>IEEE Transactions on Signal Processing</i>, Volume 56, Number 9, September 2008.</p>
2007	<p>Jan Eriksson and Visa Koivunen, for the paper entitled, Identifiability, Separability, and Uniqueness of Linear ICA Models, <i>IEEE Signal Processing Letters</i>, Volume 11, Number 7, July 2004.</p>

Multidimensional Digital Signal Processing

1991	<p>Mark J. T. Smith and Steven L. Eddins, for the paper entitled, Analysis/Synthesis Techniques for Subband Image Coding, <i>IEEE Transactions on Acoustics, Speech and Signal Processing</i>, Volume 38, Number 8, August 1990.</p>
1990	<p>S. G. Mallat.</p>
1988	<p>Y. Bresler, A. Macovski.</p>

1987	S. D. O'Neil, J. W. Woods.
1986	J. P. Allebach.
1985	M. R. Civanlar, H. J. Trussell.
Multimedia Signal Processing	
2007	Onur G. Guleryuz, for the paper entitled, Nonlinear Approximation Based Image Recovery Using Adaptive Sparse Reconstructions and Iterated Denoising - Part I: Theory, and Part II: Adaptive Algorithms, <i>IEEE Transactions on Image Processing</i> , Volume 15, Number 3, Part I and Part II, March 2006.
2005	Wade Trappe, Min Wu, Z. Jane Wang and K.J. Ray Liu, for the paper entitled, Anti-collusion Fingerprinting for Multimedia, <i>IEEE Transactions on Signal Processing</i> , Special Issue on Signal Processing for Data Hiding in Digital Media and Secure Content Delivery, Volume 51, Number 4, April 2003.
2001	Guido M. Schuster and Aggelos K. Katsaggelos, for the paper entitled, An Optimal Polygonal Boundary Encoding Scheme in the Rate Distortion Sense, <i>IEEE Transactions on Image Processing</i> , Volume 7, Number 1, January 1998.
Neural Networks for Signal Processing	
1999	Johan A. K. Suykens, Joos Vandewalle and Bart L. R. De Moor, for the paper entitled, NLq Theory: Checking and Imposing Stability of Recurrent Neural Networks for Nonlinear Modeling, <i>IEEE Transactions on Signal Processing</i> , Volume 45, Number 11, November 1997.
1998	Shun-ichi Amari and Jean-François Cardoso, for the paper entitled, Blind Source Separation - Semiparametric Statistical Approach, <i>IEEE Transactions on Signal Processing</i> , Volume 45, Number 11, November 1997.
1996	Sun-Yuan Kung, K. I. Diamantaras and J. S. Taur, for the paper entitled, Adaptive Principal Component Extraction (APEX) and Applications, <i>IEEE Transactions on Signal Processing</i> , Volume 42, Number 5, May 1994.
1995	Jenq-Neng Hwang, Shyh-Rong Lay and Alan Lippman, for the paper entitled, Nonparametric Multivariate Density Estimation: A Comparative Study, <i>IEEE Transactions on Signal Processing</i> , Volume 42, Number 10, October 1994.
1993	Biing-Hwang Juang and Shigeru Katagiri, for the paper entitled, Discriminative Learning for Minimum Error Classification, <i>IEEE Transactions on Signal Processing</i> , Volume 40, Number 12, December 1992.
Sensor Array and Multichannel	
2015	Mark A. Davenport, Petros T. Boufounos, Michael B. Wakin, and Richard G. Baraniuk, for the paper entitled, Signal Processing With Compressive Measurements, <i>IEEE Journal of Selected Topics in Signal Processing</i> , Volume 4, Number 2, April 2010.
2014	Federico S. Cattivelli, and Ali H. Sayed, for the paper entitled, Diffusion LMS Strategies for Distributed Estimation, <i>IEEE Transactions on Signal Processing</i> , Volume 58, Number 3, March 2010.
2013	Matthew Herman and Thomas Strohmer, High-Resolution Radar via Compressed Sensing, <i>IEEE Transactions on Signal Processing</i> , Volume 57, Number 6, June 2009.

2012	Seung-Jean Kim, Kwangmoo Koh, Michael Lustig, Stephen Boyd, and Dimitry Gorinevsky, for the paper entitled, An Interior-Point Method for Large-Scale l_1 Regularized Least Squares <i>IEEE Journal of Selected Topics in Signal Processing</i> , Volume 1, Number 4, December 2007.
2011	Stephen J. Wright, Robert D. Nowak, and Mário A. T. Figueiredo, for the paper entitled, Sparse Reconstruction by Separable Approximation, <i>IEEE Transactions on Signal Processing</i> , Volume 57, Number 7, July 2009.
2010	Dmitry Malioutov, Müjdat Çetin and Alan S. Willsky, for the paper entitled, A Sparse Signal Reconstruction Perspective for Source Localization With Sensor Arrays <i>IEEE Transactions on Signal Processing</i> , Volume 53, Number 8, August 2005.
2009	Quentin H. Spencer, A. Lee Swindlehurst, and Martin Haardt, for the paper entitled, Zero-Forcing Methods for Downlink Spatial Multiplexing in Multiuser MIMO Channels, <i>IEEE Transactions on Signal Processing</i> , Volume 52, Number 2, February 2004.
2007	Goran Dimić and Nicholas D. Sidiropoulos, for the paper entitled, On Downlink Beamforming With Greedy User Selection: Performance Analysis and a Simple New Algorithm, <i>Transactions on Signal Processing</i> , Volume 53, Number 10, October 2005.
2006	Richard J. Kozick and Brian M. Sadler, for the paper entitled, Source Localization with Distributed Sensor Arrays and Partial Spatial Coherence, <i>IEEE Transactions on Signal Processing</i> , Volume 52, Number 3, March 2004.
2005	A. Lee Swindlehurst and Geert Leus, for the paper entitled, Blind and Semi-Blind Equalization for Generalized Space-Time Block Codes, <i>IEEE Transactions on Signal Processing</i> , Volume 50, Number 10, October 2002.
2004	Sergiy A. Vorobyov, Alex B. Gershman and Zhi-Quan Luo, for the paper entitled, Robust Adaptive Beamforming Using Worst-Case Performance Optimization: A Solution to the Signal Mismatch Problem, <i>IEEE Transactions on Signal Processing</i> , Volume 51, Number 2, February 2003.
2003	Jean-Jacques Fuchs, for the paper entitled, On the Application of the Global Matched Filter to DOA Estimation with Uniform Circular Arrays, <i>IEEE Transactions on Signal Processing</i> , Volume 49, Number 4, April 2001.
2001	Nicholas D. Sidiropoulos, Rasmus Bro, and Georgios B. Giannakis, for the paper entitled, Parallel Factor Analysis in Sensor Array Processing, <i>IEEE Transactions on Signal Processing</i> , Volume 48, Number 8, August 2000.
1999	Petre Stoica and Mats Viberg, for the paper entitled, Maximum Likelihood Parameter and Rank Estimation in Reduced-Rank Multivariate Linear Regressions, <i>IEEE Transactions on Signal Processing</i> , Volume 44, Number 12, December 1996.
Signal Processing for Communications and Networking (formerly known as Signal Processing for Communications)	
2014	Stefania Sardellitti, Jr., Massimiliano Giona, and Sergio Barbarossa, for paper entitled, Fast Distributed Average Consensus Algorithms Based on Advection-Diffusion Processes, <i>IEEE Transactions on Signal Processing</i> , Volume 58, Number 2, February 2010.
2013	Robert Heath, Jr., Tao Wu, Young Hoon Kwon, and Anthony Soong, Multiuser MIMO in Distributed Antenna Systems with Out-of-Cell Interference, <i>IEEE Transactions on Signal Processing</i> , Volume 59, Number 10, October 2011.

2011	Nicholas D. Sidiropoulos, Timothy N. Davidson, and Zhi-Quan (Tom) Luo, for the paper entitled, Transmit Beamforming for Physical-Layer Multicasting, <i>IEEE Transactions on Signal Processing</i> , Volume 54, Number 6, June 2006.
2009	Zhi-Quan (Tom) Luo and Shuzhong Zhang, for the paper entitled, Dynamic Spectrum Management: Complexity and Duality, <i>IEEE Journal of Selected Topics in Signal Processing</i> , Volume 2, Number 1, February 2008.
2008	Wei Yu and Tian Lan, for the paper entitled, Transmitter Optimization for the Multi-Antenna Downlink With Per-Antenna Power Constraints, <i>IEEE Transactions on Signal Processing</i> , Volume 55, Number 6, June 2007.
2007	Holger Boche and Martin Schubert, for the paper entitled, Resource Allocation in Multiantenna Systems - Achieving Max-Min Fairness by Optimizing a Sum of Inverse SIR, <i>IEEE Transactions on Signal Processing</i> , Volume 54, Number 6, Part I, June 2006.
Signal Processing for Communications	
2006	Eduard A. Jorswieck and Holger Boche, for the paper entitled, Optimal Transmission Strategies and Impact of Correlation in Multiantenna Systems with Different Types of Channel State Information, <i>IEEE Transactions on Signal Processing</i> , Volume 52, Number 12, December 2004.
2005	Roberto López-Valcarce, for the paper entitled, Realizable Linear and Decision Feedback Equalizers: Properties and Connections, <i>IEEE Transactions on Signal Processing</i> , Volume 52, Number 3, March 2004.
2004	Min Dong and Lang Tong, for the paper entitled, Optimal Design and Placement of Pilot Symbols for Channel Estimation, <i>IEEE Transactions on Signal Processing</i> , Volume 50, Number 12, December 2002.
2003	Jaume Riba, Josep Sala, and Gregori Vázquez, for the paper entitled, Conditional Maximum Likelihood Timing Recovery: Estimators and Bounds, <i>IEEE Transactions on Signal Processing</i> , Volume 49, Number 4, April 2001.
2002	Michail K. Tsatsanis, Ruifeng Zhang and Subrata Banerjee, for the paper entitled, Network-Assisted Diversity for Random Access Wireless Networks, <i>IEEE Transactions on Signal Processing</i> , Volume 48, Number 3, March 2000.
2000	Anna Scaglione, Georgios B. Giannakis and Sergio Barbarossa, for the paper entitled, Redundant Filterbank Precoders and Equalizers, Part I and II, <i>IEEE Transactions on Signal Processing</i> , Volume 47, Number 7, July 1999.
Signal Processing Theory and Methods	
2015	Moshe Mishali and Yonina C. Eldar, for the paper entitled, From Theory to Practice: Sub-Nyquist Sampling of Sparse Wideband Analog Signals, <i>IEEE Journal of Selected Topics in Signal Processing</i> , Volume 4, Number 2, April 2010.
2012	David P. Wipf and Bhaskar D. Rao, for An Empirical Bayesian Strategy for Solving the Simultaneous Sparse Approximation Problem <i>IEEE Transaction on Signal Processing</i> , Volume 55, Number 7, July 2007.
2011	Pengfei Xia and Georgios B. Giannakis, for the paper entitled, Design and Analysis of Transmit-Beamforming based on Limited-Rate Feedback, <i>IEEE Transactions on Signal Processing</i> , Volume 54, Number 5, May 2006.

2010	Steven Thomas Smith, for the paper entitled, Statistical Resolution Limits and the Complexified Cramér-Rao Bound <i>IEEE Transactions on Signal Processing</i> , Volume 53, Number 5, May 2005.
2009	Genyuan Wang and Moeness G. Amin, for the paper entitled, Imaging Through Unknown Walls Using Different Standoff Distances, <i>IEEE Transactions on Signal Processing</i> , Volume 54, Number 10, October 2006.
2006	Martin Vetterli, Pina Marziliano, and Thierry Blu, for the paper entitled, Sampling Signals with Finite Rate of Innovation, <i>IEEE Transactions on Signal Processing</i> , Volume 50, Number 6, June 2002.
2003	Thierry Blu and Michael Unser, for the paper entitled, Wavelets, Fractals, and Radial Basis Functions, <i>IEEE Transactions on Signal Processing</i> , Volume 50, Number 3, March 2002.
2002	Vitor H. Nascimento and Ali H. Sayed, for the paper entitled, On the Learning Mechanism of Adaptive Filters, <i>IEEE Transactions on Signal Processing</i> , Volume 48, Number 6, June 2000.
Spectral Estimation and Modeling	
1990	R. H. Clergeot, A. Ouamri, S. Tressens.
1989	A. Nehorai, P. Stoica.
1988	Y. Rockah, P. M. Schultheiss.
1987	G. F. Boudreaux-Bartels, T. W. Parks.
1986	A. J. Barabell, M. Kaveh.
Speech and Language Processing	
2010	Jeremy Morris and Eric Fosler-Lussier, for the paper entitled, Conditional Random Fields for Integrating Local Discriminative Classifiers <i>IEEE Transactions on Audio, Speech, and Language Processing</i> , Volume 16, Number 3, March 2008.
2009	Chul Min Lee and Shrikanth S. Narayanan, for the paper entitled, Toward Detecting Emotions in Spoken Dialogs, <i>IEEE Transactions on Speech and Audio Processing</i> , Volume 13, Number 2, March 2005.
2008	Giuseppe Riccardi and Dilek Hakkani-Tür, for the paper entitled, Active Learning: Theory and Applications to Automatic Speech Recognition, <i>IEEE Transactions on Speech and Audio Processing</i> , Volume 13, Number 4, July 2005.
2007	Hong-Kwang Jeff Kuo and Yuqing Gao, for the paper entitled, Maximum Entropy Direct Models for Speech Recognition, <i>IEEE Transactions on Audio, Speech, and Language Processing</i> , Volume 14, Number 3, May 2006.
Speech Processing	
2005	Shrikanth Narayanan and Alexandros Potamianos, for the paper entitled, Creating Conversational Interfaces for Children, <i>IEEE Transactions on Speech and Audio Processing</i> , Volume 10, Number 2, February 2002.

2004	Enrico Bocchieri and Brian Kan-Wing Mak, for the paper entitled, Subspace Distribution Clustering Hidden Markov Model, <i>IEEE Transactions on Speech and Audio Processing</i> , Volume 9, Number 3, March 2001.
2002	Mark J. F. Gales, for the paper entitled, Semi-Tied Covariance Matrices for Hidden Markov Models, <i>IEEE Transactions on Speech and Audio Processing</i> , Volume 7, Number 3, May 1999.
2000	Makund Padmanabhan, Lalit R. Bahl and David Nahamoo, for the paper entitled, Partitioning the Feature Space of a Classifier with linear Hyperplanes, <i>IEEE Transactions on Speech and Audio Processing</i> , Volume 7, Number 3, May 1999.
1999	Mari Ostendorf, Vassilios V. Digalakis and Owen A. Kimball, for the paper entitled, From MM's to segment models: A Unified View of Stochastic Modeling for Speech Recognition, <i>IEEE Transactions on Speech and Audio Processing</i> , Volume 4, Number 5, September 1996.
1998	R. A. Sukkar and C.-H. Lee, for the paper entitled, Vocabulary Independent Discriminative Utterance Verification for Nonkeyword Rejection in Subword Based Speech Recognition, <i>IEEE Transactions on Speech and Audio Processing</i> , Volume 4, Number 6, November 1996.
1997	Alan V. McCree and Thomas P. Barnwell, III, for the paper entitled, A Mixed Excitation LPC Vocoder Model for Low Bit Rate Speech Coding, <i>IEEE Transactions on Speech and Audio Processing</i> , Volume 3, Number 4, July 1995.
1996	Jean-Luc Gauvain and Chin-Hui Lee, for the paper entitled, Maximum <i>a Posteriori</i> Estimation for Multivariate Gaussian Mixture Observations of Markov Chains, <i>IEEE Transactions on Speech and Audio Processing</i> , Volume 2, Number 2, April 1994.
1995	Kuldip K. Paliwal and Bishnu S. Atal, for the paper entitled, Efficient Vector Quantization of LPC Parameters at 24 Bits/Frame, <i>IEEE Transactions on Speech and Audio Processing</i> , Volume 1, Number 1, January 1993.
1994	Chin-Hui Lee, Chih-Heng Lin and Biing-Hwang Juang, for the paper entitled, A Study on Speaker Adaptation of the Parameters of Continuous Density Hidden Markov Models, <i>IEEE Transactions on Signal Processing</i> , Volume 39, Number 4, April 1991.
1993	Michael W. Marcellin, Thomas R. Fischer and Jerry D. Gibson, for the paper entitled, Predictive Trellis Coded Quantization of Speech, <i>IEEE Transactions</i> , Volume 38, Number 1, January 1990.
1991	Lalit R. Bahl, Peter F. Brown, Peter V. de Souza and Robert L. Mercer, for the paper entitled, A Tree-Based Statistical Language Model for Natural Language Speech Recognition, <i>IEEE Transactions on Acoustics, Speech and Signal Processing</i> , Volume 37, Number 7, July 1989.
1990	T. Hanazawa, G. Hinton, K. J. Lang, K. Shikano, A. Waibel.
1989	R. J. McAulay, T. F. Quatieri.
1988	S. Furui.
1987	E. L. Bocchieri, G. D. Doddington.
1986	S. S. Evertt, G. S. Kang.
1985	A. E. Rosenberg, K. L. Shipley.

Statistical Signal and Array Processing

1998	Alfred O. Hero, III, Jeffrey A. Fessler and Mohammad Usman, for the paper entitled, Exploring Estimator Bias-Variance Tradeoffs Using the Uniform CR Bound, <i>IEEE Transactions on Signal Processing</i> , Volume 44, Number 8, August 1996.
1997	Eric Moulines, Pierre Duhamel, Jean-François Cardoso, and Sylvie Mayrargue, for the paper entitled, Subspace Methods for the Blind Identification of Multichannel FIR Filters, <i>IEEE Transactions on Signal Processing</i> , Volume 43, Number 2, February 1995.
1992	Duncan M. Dlugos and Robert A. Scholt, for the paper entitled, Acquisition of Spread Spectrum Signals by an Adaptive Array, <i>IEEE Transactions on Acoustics, Speech, and Signal Processing</i> , Volume 37, Number 8, August 1989.

Transactions on Information Forensics and Security (TIFS)

2012	Robert Wilson, David Tse, and Robert A. Scholtz for Channel Identification: Secret Sharing Using Reciprocity in Ultrawideband Channels <i>IEEE Transactions on Information Forensics and Security</i> , Volume 2, Number 3, September 2007. Yagiz Sutcu, Qiming Li, and Nasir Memon for Protecting Biometric Templates with Sketch: Theory and Practice <i>IEEE Transactions on Information Forensics and Security</i> , Volume 2, Number 3, September 2007.
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Underwater Acoustics for Signal Processing

1987	J. P. Ianniello.
1986	N. J. Bershad, P. L. Feintuch, F. A. Reed.
1985	T. Kailath, M. Wax.

VLSI for Signal Processing

1994	Phu D. Hoang and Jan M. Rabaey, for the paper entitled, Scheduling of DSP Programs onto Multiprocessors for Maximum Throughput, <i>IEEE Transactions on Signal Processing</i> , Volume 41, Number 6, June 1993.
1993	KuoJuey Ray Liu, Shih-Fu Hsieh and Kung Yao, for the paper entitled, Systolic Block Householder Transformation for RLS Algorithm with Two-Level Pipelined Implementation, <i>IEEE Transactions on Signal Processing</i> , Volume 40, Number 4, April 1992.
1992	Rajeev Jain, Paul T. Yang and Toshiaki Yoshino, for the paper entitled, Firgen: A Computer-Aided Design System for High Performance FIR Filter Integrated Circuits, <i>IEEE Transactions on Signal Processing</i> , Volume 39, Number 7, July 1991.
1990	R. F. Lyon, C. Mead.