

Dominic K. C. Ho, FIEEE

Title:

James C. Dowell Professor, Department of Electrical and Computer Engineering
University of Missouri, USA

Education:

1991: Ph.D., Electronic Engineering, The Chinese University of Hong Kong, Hong Kong
1988: B.Sc. (First Class Honours), Electronics, The Chinese University of Hong Kong, Hong Kong

Academic Experience:

9/07 – present: Professor, University of Missouri
9/03 – 8/07: Associate Professor, University of Missouri
9/97 – 8/03: Assistant Professor, University of Missouri
9/96 – 8/97: Research Associate Professor, University of Saskatchewan, Canada
12/91–12/94: Research Associate, Royal Military College, Canada

Industrial Experience:

1/95 – 8/96: Member of Scientific Staff, Wireless Networks and Speech Services,
Bell–Northern Research

Areas of Interests:

- Array Processing: array design, beamforming, microphone array.
- Elder Care: fall detection, health monitoring.
- Localization: passive localization, satellite geolocation, self localization.
- Statistical Signal Processing: radar, sonar, delay and Doppler estimation.
- Subsurface Object Detection: ground penetrating radar in handheld, robotic and vehicle platform.
- Wireless Communications: MIMO, cognitive radio.

Research Grants Support:

- Agency for Healthcare Research and Quality (AHRQ)
- Air Force Office of Scientific Research (AFOSR)
- Army Research Office (ARO)
- Defense Advanced Research Projects Agency (DARPA)
- Defense Research Establishment Ottawa, Canada (DREO)
- Ericsson
- Leonard Wood Institute (LWI)
- National Science Foundation (NSF)
- Nortel Networks
- Northrop Grumman
- U.S. Army

Honors and Awards:

- Senior Faculty Research Award, College of Engineering, Univ. of Missouri, 2014.
- Distinguished Alumni Award, EE Department, Chinese Univ. of Hong Kong, 2012.
- IEEE Fellow (For Contributions to “Active and Passive Signal Source Location Technologies”), since 2009.
- Senior Faculty Research Award, College of Engineering, Univ. of Missouri, 2009.
- Teaching Award, ECE Dept, College of Engineering, Univ. of Missouri, 2006.
- Junior Faculty Research Award, College of Engineering, Univ. of Missouri, 2003.
- Listed in Who's Who in Education, Marquis, since 2006.
- Listed in Who's Who in Science and Engineering, Marquis, since 2004.
- Listed in Who's Who in America and in the World, Marquis, since 2001.

Professional Activities:

Rapporteur:

- ITU-T (International Telecommunication Union – Standardization) Q16/SG16: Speech enhancement functions in signal processing network equipment, 2013 (Associate Rapporteur).
- ITU-T Q15/SG16: Voice gateway signal processing functions and circuit multiplication equipment / systems, 2009 – 2012.

Editor:

- ITU-T G.160: Voice Enhancement Devices, 2006 – 2013.
- ITU-T G.168: Digital Network Echo Cancellers, 2000 – 2013.
- ITU-T G.799.2: Mechanism for Dynamic Coordination for Signal Processing Functions, 2004 – 2010.

Associate Editor:

- IEEE Trans on Signal Processing, IEEE Signal Processing Society, 1/09 – 12/12 (2nd term), 8/03 – 7/06 (1st term).
- IEEE Signal Processing Letters, IEEE Signal Processing Society, 2/04 – 1/08.

Guest Editor:

- IEEE Signal Processing Magazine: Special Issue on Signal Processing on Assisted Living, 2015.
- EURASIP Journal on Advances in Signal Processing: Special Issue on Object Tracking and Monitoring Using Advanced Signal Processing Techniques, 2011.

Technical Committee:

- Member, Signal Processing Theory and Methods (SPTM) Technical Committee, IEEE Signal Processing Society, 2016 – present.
- Past Chair, Sensor Array and Multichannel (SAM) Technical Committee, IEEE Signal Processing Society, 2015.
- Chair, Sensor Array and Multichannel (SAM) Technical Committee, IEEE Signal Processing Society, 2013 – 2014.
- Vice-Chair, Sensor Array and Multichannel (SAM) Technical Committee, IEEE Signal Processing Society, 2011 – 2012.

- Member, Sensor Array and Multichannel (SAM) Technical Committee, IEEE Signal Processing Society, 2006 – present.
- Member, Digital Signal Processing Technical Committee, IEEE Circuits and Systems Society, 2002 – present.

Core Membership, Industrial Standard Development:

- ITU–T (International Telecommunication Union – Standardization) Study Group 16: Lead Study Group on Multimedia Coding, Systems and Applications, 1995–2012.
- North America TIA (Telecommunications Industry Association) Digital Cellular/ PCS Standard, 1995–1996.

Conference Organization Committee:

- Technical Program Co-Chair, IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP-2016), 2014 – 2016.
- Finance Chair, The 4th IEEE Int. Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP), San Juan, Puerto Rico, 2011.
- Publicity Chair, The 5th IEEE Sensor Array and Multichannel (SAM) Processing Workshop, Darmstadt, Germany, 2008.

Organization of Invited/Special Session:

- Landmine and Subsurface Object Detection, IEEE Int. Geoscience and Remote Sensing Symp., 2004 (IGARSS-2004).
- Advances in Speech Processing and Applications, IEEE Int. Symp. Circuits and Systems, 2004 (ISCAS-2004).
- Digital Filter Design and Applications, IEEE Int. Mid–West Symp. Circuits and Systems, 2002 (MWSCAS-2002).

Conference Technical Program Committee:

- The 9th IEEE Sensor Array and Multichannel (SAM) Processing Workshop, Rio de Janeiro, Brazil, 2016.
- The 6th IEEE Int. Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP), Cancun, Mexico, 2015.
- The 8th IEEE Sensor Array and Multichannel (SAM) Processing Workshop, A Coruña, Spain, 2014.
- The 5th IEEE Int. Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP), Saint Martin, 2013.
- The 7th IEEE Sensor Array and Multichannel (SAM) Processing Workshop, Hoboken, New Jersey, 2012.
- The 4th IEEE Int. Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP), San Juan, Puerto Rico, 2011.
- The 6th IEEE Sensor Array and Multichannel (SAM) Processing Workshop, Jerusalem, Israel, 2010.

Conference Session Chair/Co–Chair:

- IEEE Int. Conf. Acoustics, Speech, Signal Processing (ICASSP), 2004 – 2015.
- IEEE Int. Geoscience and Remote Sensing Symp. (IGARSS), 2004.
- IEEE Int. Symp. Circuits and Systems (ISCAS), 2004 – 2005.
- IEEE Int. Mid–West Symp. Circuits and Systems (MWSCAS), 2002.

- SPIE Defense & Security Symp., 2004 – 2005, 2016.

Journal Paper Reviewer:

- IEEE Journal of Selected Topics in Signal Processing, since 2007.
- IEEE Signal Processing Letters, since 1998.
- IEEE Signal Processing Magazine, since 2004.
- IEEE Transactions on Aerospace and Electronic Systems, since 1994.
- IEEE Transactions on Circuits and Systems, Part II, since 1996.
- IEEE Transactions on Geoscience and Remote Sensing, since 2002.
- IEEE Transactions on Mobile Computing, since 2012.
- IEEE Transactions on Signal Processing, since 1993.
- IEEE Transactions on Audio, Speech and Language Processing, since 1998.
- IEEE Transactions on Vehicle Technology, since 2001.
- IEEE Transactions on Wireless Communications, since 2003.
- IEE Electronics Letters, since 1999.
- IEE Proceedings: Radar, Sonar and Navigation, since 1998.
- Digital Signal Processing, ELSEVIER, since 2005.
- International Journal of Adaptive Control and Signal Processing, since 1997.

External Examiner:

- PhD Thesis, Chinese University of Hong Kong, 2014.
- PhD Thesis, Hong Kong Polytechnic University, 2010.
- Master Thesis, Hong Kong Polytechnic University, 2005.
- Master Thesis, The Chinese University of Hong Kong, 2004.
- Master Thesis, McGill University, Canada, 1997.
- Master Thesis, Royal Military College of Canada, 1995, 1996, 2000.

Journal Publications (99):

- (1) M. Al-Ali and K. C. Ho, "Transmit precoding in underlay MIMO cognitive radio with unavailable or imperfect knowledge of primary interference channel," *IEEE Trans. Wireless Commun.*, to appear.
- (2) L. Yang, L. Yang, and K. C. Ho, "Moving target localization in multistatic sonar by differential delays and Doppler shifts," *IEEE Signal Process. Lett.*, to appear.
- (3) L. Rosales, B. Y. Su, M. Skubic, and K. C. Ho, "Heart rate monitoring using hydraulic bed sensor ballistocardiogram," *J. Ambient Intelligence Smart Environments*, to appear.
- (4) L. Rui, S. Chen, K. C. Ho, M. Skubic, and M. Rantz, "Estimation of human walking speed by Doppler radar for elderly care," *J. Ambient Intelligence Smart Environments*, to appear.
- (5) M. G. Amin, Y. D. Zhang, F. Ahmad, and K. C. Ho, "Radar signal processing for elderly fall detection," *IEEE Signal Process. Mag.*, vol. 33, pp. 71-80, Mar. 2016.
- (6) A. Al-sharadqah and K. C. Ho, "Solutions and evaluations for fitting of concentric circles," *Signal Processing, Elsevier*, vol. 120, pp. 468-479, Mar. 2016.
- (7) J. Yin, Q. Wan, S. Yang, and K. C. Ho, "A simple and accurate TDOA-AOA localization method using two stations," *IEEE Signal Process. Lett.*, vol. 23, pp. 144-148, Jan. 2016.

- (8) S. Chen and K. C. Ho, "Accurate localization of a rigid body using multiple sensors and landmarks," *IEEE Trans. Signal Process.*, vol. 63, no. 24, pp. 6459-6472, Dec. 2015.
- (9) Y. Wang and K. C. Ho, "An asymptotically efficient estimator in closed-Form for 3D AOA localization using a sensor network," *IEEE Trans. Wireless Commun.*, vol. 14, no. 12, pp. 6524-6535, Dec. 2015.
- (10) B. Y. Su, K. C. Ho, M. J. Rantz, and M. Skubic, "Doppler radar fall activity detection using the wavelet transform," *IEEE Trans. Biomed. Eng.*, vol. 62, no. 3, pp. 865-875, Mar. 2015.
- (11) L. Rui and K. C. Ho, "Efficient closed-form estimators for multistatic sonar localization," *IEEE Trans. Aerosp. Electron. Syst.*, vol. 51, no. 1, pp. 600-614, Jan. 2015.
- (12) Z. Ma and K. C. Ho, "A study on the effects of sensor position error and the placement of calibration emitter for source localization," *IEEE Trans. Wireless Commun.*, vol. 13, no. 6, pp. 5440-5452, Oct. 2014.
- (13) L. Rui and K. C. Ho, "Bias analysis of the maximum likelihood target location estimator," *IEEE Trans. Aerosp. Electron. Syst.*, vol. 50, pp. 2679-2693, Oct. 2014.
- (14) L. Rui and K. C. Ho, "Elliptic localization: performance study and optimum receiver placement," *IEEE Trans. Signal Process.*, vol. 62, pp. 4673-4688, Sep. 2014.
- (15) L. Rui and K. C. Ho, "Algebraic solution for joint localization and synchronization of multiple sensor nodes in the presence of beacon uncertainties," *IEEE Trans. Wireless Commun.*, vol. 13, pp. 5196-5210, Sep. 2014.
- (16) M. Sun and K. C. Ho, "Optimum sensor placement for fully and partially controlled sensor networks: a unified approach," *Signal Processing*, Elsevier, vol. 102, pp. 58-63, Sep. 2014.
- (17) Y. Li, K. C. Ho, and M. Popescu, "Efficient source separation algorithms for acoustic fall detection using a Microsoft Kinect," *IEEE Trans. Biomed. Eng.*, vol. 61, pp. 745-755, Mar. 2014.
- (18) D. P. K. Lun, T.-W. Shen, and K. C. Ho, "A novel expectation-maximization framework for speech enhancement in non-stationary noise environments," *IEEE Trans. Audio, Speech, Language Process.*, vol. 22, pp. 335-346, Feb. 2014.
- (19) Z. Ma and K. C. Ho, "Asymptotically efficient estimators for the fittings of coupled circles and ellipses," *Elsevier Digital Signal Processing*, vol. 25, pp. 28-40, Feb. 2014.
- (20) A. Zare and K. C. Ho, "Endmember variability in hyperspectral analysis," *IEEE Signal Processing Mag.*, pp. 95-104, Jan. 2014.
- (21) L. Lin, H. C. So, K. W. Chan, Y. T. Chan, and K. C. Ho, "A new constrained weighted least squares algorithm for TDOA-based localization," *Elsevier Signal Processing*, vol. 93, pp. 2872-2878, Nov. 2013.
- (22) Y. Wang and K. C. Ho, "TDOA source localization in the presence of synchronization clock bias and sensor position errors," *IEEE Trans. Signal Processing*, vol. 61, pp. 4532-4544, Sep. 2013.
- (23) M. Rantz, M. Skubic, C. Abbott, C. Galambos, Y. Pak, K. C. Ho, E. E. Stone, L. Rui, J. Back, and S. J. Miller, "In-home fall risk assessment and detection sensor system," *J. Gerontological Nursing*, vol. 39, no. 7, pp. 19-22, 2013.

- (24) H. C. So, Y. T. Chan, K. C. Ho, and Y. Chen, "Simple formula for bias and mean square error computation," *IEEE Signal Processing Mag.*, vol. 30, pp. 162-165, Jul. 2013.
- (25) S. Chen and K. C. Ho, "Achieving asymptotic efficient performance for squared range and squared range rate difference localizations," *IEEE Trans. Signal Processing*, vol. 11, pp. 2836-2849, Jun. 2013.
- (26) M. Sun, L. Yang, and K. C. Ho, "Accurate sequential self-localization of sensor nodes in closed-form," *Elsevier Int. J. Signal Processing*, vol. 92, pp. 2940-2951, Dec. 2012.
- (27) T.-W. Shen, D. P. K. Lun, T. C. Hsung, and K. C. Ho, "Wavelet based speech presence probability estimator for speech enhancement," *Elsevier Digital Signal Processing*, vol. 22, pp. 1161-1173, Dec. 2012.
- (28) M. Sun and K. C. Ho, "Refining inaccurate sensor positions using target at unknown location," *Elsevier Int. J. Signal Processing*, vol. 92, pp. 2097-2104, Sep. 2012.
- (29) M. Sun, L. Yang, and K. C. Ho, "Efficient joint source and sensor localization in closed-form," *IEEE Signal Processing Letters*, vol. 19, pp. 399-402, Jul. 2012.
- (30) K. C. Ho, "Bias reduction for an explicit solution of source localization using TDOA," *IEEE Trans. Signal Processing*, vol. 60, pp. 2101-2114, May 2012.
- (31) Y. Li, K. C. Ho, and M. Popescu, "A microphone array system for automatic fall detection," *IEEE Trans. Biomed. Eng.*, vol. 59, pp. 12921-1301, May 2012.
- (32) H. Frigui, L. Zhang, P. Gader, J. N. Wilson, K. C. Ho, and A. Mendez-Vaquez, "A large-scale evaluation of several fusion algorithms for landmine detections and discrimination," *Elsevier Information Fusion*, vol. 13, pp. 161-174, Apr. 2012.
- (33) M. Sun and K. C. Ho, "An asymptotically efficient estimator for TDOA and FDOA positioning of multiple disjoint sources in the presence of sensor location uncertainties," *IEEE Trans. Signal Processing*, vol. 59, pp. 3434-3440, July 2011.
- (34) L. Yang and K. C. Ho, "Alleviating sensor position error in source localization using calibration emitters at inaccurate locations," *IEEE Trans. Signal Processing*, vol. 58, pp. 67-83, Jan. 2010.
- (35) L. Yang and K. C. Ho, "An approximately efficient TDOA localization algorithm in closed-form for locating multiple disjoint sources with erroneous sensor positions," *IEEE Trans. Signal Processing*, vol. 57, pp. 4598-4615, Dec. 2009.
- (36) M. Sun and K. C. Ho, "Accurate algebraic solutions for sensor node localization using time of arrival measurements," *IEEE Trans. Signal Processing*, vol. 57, pp. 4522-4537, Nov. 2009.
- (37) K. C. Ho and L. Vicente, "Sensor allocation for source localization with decoupled range and bearing estimation," *IEEE Trans. Signal Processing*, vol. 56, pp. 5773-5789, Dec. 2008.
- (38) K. C. Ho and L. Yang, "On the use of a calibration emitter for source localization in the presence of sensor position uncertainty," *IEEE Trans. Signal Processing*, vol. 56, pp. 5758-5772, Dec. 2008.
- (39) K. C. Ho and Y. T. Chan, "Bearing-Only and Doppler-Bearing TMA using geometric approach in polar coordinates," *IEEE Trans. Signal Processing*, vol. 56, pp. 5540-5554, Nov. 2008.

- (40) W. Ng, T. C. T. Chan, H. C. So, and K. C. Ho, "On particle filters for landmine detection using impulse ground penetrating radar," *IEEE Trans. Geosci. Remote Sensing.*, vol. 46, pp. 3739-3755, Nov. 2008.
- (41) L. Yang, M. Sun, and K. C. Ho, "Doppler-bearing tracking in the presence of observer location error," *IEEE Trans. Signal Processing*, vol. 56, pp. 4082-4087, Aug. 2008.
- (42) Y. Li, L. Vicente, K. C. Ho, C. Kwan, Daniel P. K. Lun, and Y. H. Leung, "A study of partially adaptive concentric ring array," *J. Circuits, Systems, Signal Processing*, vol. 27, pp. 733-748, July 2008.
- (43) K. C. Ho, L. Carin, P. D. Gader, and J. N. Wilson, "An investigation of using the spectral characteristics from ground penetrating radar for landmine/clutter discrimination," *IEEE Trans. Geosci. Remote Sensing*, vol. 46, pp. 1177-1191, Apr. 2008.
- (44) Thomas Chan, H. C. So, and K. C. Ho, "Generalized two-sided linear prediction approach for landmine detection," *Fast Communications, Signal Processing*, Elsevier, vol. 88, pp. 1053-1060, Apr. 2008.
- (45) Z. G. Zhang, S. C. Chan, K. L. Ho, and K. C. Ho, "On bandwidth selection in local polynomial regression analysis and its application to multi-resolution analysis of non-uniform data," *J. Signal Processing Systems*, vol. 52, no. 3, 2008.
- (46) K. C. Ho and M. Sun, "Passive source localization using time differences of arrival and gain ratios of arrival," *IEEE Trans. Signal Processing*, vol. 56, pp. 464- 477, Feb. 2008.
- (47) T. C. Hsung, D. P. K. Lun, Y. H. Shum, and K. C. Ho, "Generalized discrete multiwavelet transform with embedded orthogonal symmetric prefilter bank," *IEEE Trans. Signal Processing*, vol. 55, pp. 5619-5629, Dec. 2007.
- (48) K. C. Ho and M. Sun, "An accurate algebraic closed-form solution for energy-based source localization," *IEEE Trans. Audio, Speech, Language Processing*, vol. 15, pp. 2542-2550, Nov. 2007.
- (49) R. Cepel, K. C. Ho, B. A. Rinker, E. E. Jamieson, J. A. Samayoa, J. P. Miller, D. D. Palmer, T. P. Lerch, and S. P. Neal, "Spatial correlation coefficient images for ultrasound detection," *IEEE Trans. Ultrasonics, Ferroelectrics, and Frequency Control*, pp. 1841-1850, Sep. 2007.
- (50) R. Cepel, L. Thombs, K. C. Ho, and S. P. Neal, "Statistical analysis and computer generation of spatially correlated acoustic noise," *J. Non-destructive Evaluation*, Springer, May 2007.
- (51) J. N. Wilson, P. D. Gader, W. H. Lee, H. Frigui, and K. C. Ho, "A rigorous evaluation of algorithms using ground penetrating radar for landmine detection and discrimination," *IEEE Trans. Geosci. Remote Sensing*, vol. 45, pp. 2560-2572, Aug. 2007.
- (52) R. Cepel, K. C. Ho, B. A. Rinker, D. D. Palmer, Jr., and S. P. Neal, "Ultrasonic detection using correlation images," *Review of Progress in Quantitative Nondestructive Evaluation*, vol. 26, AIP, Melville, 2007. 1
- (53) H. C. So, Y. T. Chan, K. C. Ho, and F. K. W. Chan, "Unbiased equation-error based algorithms for efficient system identification using noisy measurements," *Signal Processing*, ELSEVIER, vol. 87, pp. 1014-1030, May 2007.

- (54) K. C. Ho, X. Lu, and V. Mehta, "Adaptive blind narrowband interference cancellation for multi-user detection," *IEEE Trans. Wireless Commun.*, vol. 6, pp. 1024–1033, Mar. 2007.
- (55) K. C. Ho, X. Lu, and L. Kovavisaruch, "Source localization using TDOA and FDOA measurements in the presence of receiver location errors: analysis and solution," *IEEE Trans. Signal Processing*, vol. 55, pp. 684–696, Feb. 2007.
- (56) J. Stanley, K. C. Ho, P. D. Gader, J. N. Wilson, and J. Devaney, "Land mine and clutter object discrimination using wavelet and time domain spatially distributed features from metal detectors and their fusion with GPR features for hand-held units," *J. Circuits, Systems and Signal Processing*, vol. 26, no. 2, pp. 165–191, Feb. 2007.
- (57) C. Kwan, K. C. Ho, G. Mei, Y. Li, Z. Ren, R. Xu, Y. Zhang, D. Lao, M. Stevenson, V. Stanford, and C. Rochet, "An automated acoustic system to monitor and classify birds," *EURASIP J. Applied Signal Processing*, vol. 2006, Article ID 96706, 19 pages, 2006.
- (58) T. C. Huang, D. P. K. Lun, and K. C. Ho, "Orthogonal symmetric prefilter banks for discrete multiwavelet transform," *IEEE Signal Processing Letters*, vol. 13, no. 3, pp. 145–148, Mar. 2006.
- (59) K. C. Ho and Y. T. Chan, "An unbiased estimator for bearings-only tracking and Doppler-bearing tracking," *IEEE Trans. Signal Processing*, vol. 54, pp. 809–822, Mar. 2006.
- (60) Y. Li, K. C. Ho, and C. Kwan, "3-D array pattern synthesis with frequency invariant property for concentric ring array," vol. 54, pp. 780–784, *IEEE Trans. Signal Processing*, Feb. 2006.
- (61) Y. T. Chan and K. C. Ho, "Joint time-scale and TDOA estimation: analysis and fast approximation," vol. 53, pp. 2625–2634, *IEEE Trans. Signal Processing*, Aug. 2005.
- (62) L. Hong and K. C. Ho, "Classification of BPSK and QPSK signals using an antenna array," *J. Circuits, Systems, Signal Processing*, Springer-Verlag, vol. 24, no. 4, pp. 343–361, 2005.
- (63) H. C. So, K. W. Chan, Y. T. Chan, and K. C. Ho, "Linear prediction approach for efficient frequency estimation for multiple real sinusoids: algorithms and analysis," *IEEE Trans. Signal Processing*, vol. 53, pp. 2280–2290, July 2005.
- (64) S. D. Blunt and K. C. Ho, "An iterative approximate MAP symbol estimator for uncoded synchronous CDMA," *IEEE Trans. Wireless Commun.*, vol. 4, pp. 1663–1673, July 2005.
- (65) H. Frigui, K. C. Ho, and P. D. Gader, "Real-time land mine detection with ground penetrating radar using discriminative and adaptive hidden Markov models," *J. Applied Signal Processing*, EURASIP, vol. 2005, no. 12, pp. 1867–1885, July 2005.
- (66) T.-C. Hsung, D. P. K. Lun, and K. C. Ho, "Optimizing the multiwavelet shrinkage denoising," *IEEE Trans. Signal Processing*, vol. 53, pp. 240–251, Jan. 2005.
- (67) K. C. Ho and W. Xu, "An accurate algebraic solution for moving source location using TDOA and FDOA measurements," *IEEE Trans. Signal Processing*, vol. 52, pp. 2453–2463, Sep. 2004.
- (68) K. C. Ho, L. M. Collins, L. G. Huettel, and P. D. Gader, "Discrimination mode processing for EMI and GPR sensors for hand-held landmine detection," *IEEE Trans. Geosci. Remote Sensing*, vol. 42, pp. 249–263, Jan. 2004.

- (69) K. C. Ho and S. D. Blunt, "Adaptive sparse system identification in the Haar domain," *IEEE Trans. Signal Processing*, vol. 51, no. 3, pp. 628–638, Mar. 2003.
- (70) K. C. Ho and S. D. Blunt, "Adaptive sparse system identification using wavelets," *IEEE Trans. Circuits Syst. II*, vol. 49, pp. 656–667, Oct. 2002.
- (71) K. C. Ho and P. D. Gader, "A linear prediction land mine detector algorithm for hand held ground penetrating radar," *IEEE Trans. Geosci. Remote Sensing*, vol. 40, pp. 1374–1384, Jun. 2002.
- (72) R. J. Stanley, P. D. Gader, and K. C. Ho, "Feature and decision level sensor fusion of electromagnetic induction and ground penetrating radar sensors for landmine detection with hand-held units," *Information Fusion*, 3(3), pp. 215–223, 2002.
- (73) K. C. Ho, "Performance of multiple adaptive filters in Tandem," *IEEE Trans. Signal Processing*, vol. 49, pp. 2762–2773, Nov. 2001.
- (74) K. C. Ho and Y. T. Chan, "An iterative algorithm for two-scale wavelet decomposition," *IEEE Trans. Signal Processing*, vol. 49, pp. 254–257, Jan. 2001.
- (75) K. C. Ho, W. Prokopiw, and Y. T. Chan, "Modulation identification of digital signals by the wavelet transform," *IEE Proc.–Radar, Sonar Navig.*, vol. 147, pp. 169–176, Aug. 2000.
- (76) K. C. Ho, "A study of two adaptive filters in tandem," *IEEE Trans. Signal Processing*, vol. 48, pp. 1626–1636, Jun. 2000.
- (77) Y. T. Chan, K. C. Ho, and S. K. Wong, "Aircraft identification from RCS measurement using orthogonal transform," *IEE Proc.–Radar, Sonar Navig.*, vol. 147, pp. 93–102, Apr. 2000.
- (78) Q. G. Liu, B. Champagne, and K. C. Ho, "Simple design of uniform DFT filter banks with applications to subband adaptive filtering," *Signal Processing*, Elsevier, vol. 80, pp. 831–847, Apr. 2000.
- (79) K. C. Ho and Y. T. Chan, "Filter design and comparison for two fast CWT algorithms," *IEEE Trans. Signal Processing*, vol. 47, pp. 3013–3026, Nov. 1999.
- (80) K. C. Ho and Y. T. Chan, "Optimum discrete wavelet scaling and its application to delay and Doppler estimation," *IEEE Trans. Signal Processing*, vol. 46, pp. 2285–2290, Sep. 1998.
- (81) K. C. Ho, A. E. Scheidl, Y. T. Chan, and R. J. Inkol, "Signal identification by orthogonal transform," *IEE Proc.–Radar, Sonar Navig.*, vol. 145, pp. 145–152, Jun. 1998.
- (82) K. C. Ho, "Fast CWT computation at integer scales by the generalized MRA structure," *IEEE Trans. Signal Processing*, vol. 46, pp. 501–506, Feb. 1998.
- (83) K. C. Ho and Y. T. Chan, "Geolocation of a known altitude object from TDOA and FDOA measurements," *IEEE Trans. Aerosp. Electron. Syst.*, vol. 33, pp. 770–783, July 1997.
- (84) K. C. Ho, Y. T. Chan, and R. J. Inkol, "A new digital quadrature demodulation system," *IEEE Trans. Aerosp. Electron. Syst.*, vol. 32, pp. 1218–1227, Oct. 1996.
- (85) Y. T. Chan and K. C. Ho, "Multiresolution analysis and wavelet transform," *IEEE Trans. Signal Processing*, vol. 44, pp. 1001–1006, Apr. 1996.
- (86) K. C. Ho, "A minimum misadjustment adaptive FIR filter," *IEEE Trans. Signal Processing*, vol. 44, pp. 577–585, Mar. 1996.

- (87) K. C. Ho and P. C. Ching, "Split filter structure for LMS adaptive filtering," *Signal Processing*, Elsevier, vol. 46, pp. 255–266, Oct. 1995.
- (88) K. C. Ho, Y. T. Chan, and R. J. Inkol, "Arrival time estimation of radar pulses based on amplitude ratios," *IEE Proc. Part F*, vol. 142, pp. 153–157, Aug. 1995.
- (89) K. C. Ho and Y. T. Chan, "Bias removal of equation error adaptive IIR filter," *IEEE Trans. Signal Processing*, vol. 43, pp. 51–62, Jan. 1995.
- (90) Y. T. Chan and K. C. Ho, "A simple and efficient estimator for hyperbolic location," *IEEE Trans. Signal Processing*, vol. 42, pp. 1905–1915, Aug. 1994.
- (91) K. C. Ho and Y. T. Chan, "Solution and performance analysis of geolocation by TDOA," *IEEE Trans. Aerosp. Electron. Syst.*, vol. 29, pp. 1311–1322, Oct. 1993.
- (92) K. C. Ho, Y. T. Chan, and P. C. Ching, "Adaptive time delay estimation in nonstationary signal and/or noise power environments," *IEEE Trans. Signal Processing*, vol. 41, pp. 2289–2299, July 1993.
- (93) K. C. Ho and P. C. Ching, "Statistical performance analysis of a fast stochastic gradient for constrained adaptive time delay estimation," *Circuits, Systems, Signal Processing*, vol. 12, pp. 453–464, 1993.
- (94) K. C. Ho, P. C. Ching, and Y. T. Chan, "A new configuration for convergence speedup in adaptive time delay estimation," *IEEE Trans. Signal Processing*, vol. 40, pp. 2683–2691, Nov. 1992.
- (95) K. F. Wan, P. C. Ching, and K. C. Ho, "DWT domain split structure LMS adaptive filter," *Electron. Lett.*, vol. 28, 20 (Sep. 1992), pp. 1929–1930.
- (96) K. C. Ho and P. C. Ching, "Performance analysis of a split-path LMS adaptive filter for AR modeling," *IEEE Trans. Signal Processing*, vol. 40, pp. 1375–1382, Jun. 1992.
- (97) P. C. Ching, Y. T. Chan, and K. C. Ho, "Constrained adaptation for time delay estimation with a multipath," *IEE Proc.–Radar, Sonar Navig.*, vol. 138, pp. 453–458, Oct. 1991.
- (98) P. C. Ching and K. C. Ho, "Split structure for adaptive line enhancer," *Int. J. Electronics*, vol. 70, pp. 565–571, Mar. 1991.
- (99) K. C. Ho and P. C. Ching, "A new constrained least mean square time–delay estimation system," *IEEE Trans. Circuits Syst.*, vol. 37, pp. 1060–1064, Aug. 1990.

Conference Publications (146):

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