

PUBLICATIONS

Research Papers Published in Refereed Journals:

- J1 S. Chinveeraphan, A. B. C. Zidouri, and M. Sato, "Fast Algorithms for Minimum Covering Run Expression," IEICE Trans. Inf. & Syst., Vol.E77--D, no. 3, pp. 317--325, March 1994.
- J2 A. Zidouri, S. Chinveeraphan, and M. Sato, "Classification of Compound Document Image Patterns by MCR Stroke Index," IEICE Trans. Inf. & Syst., vol. E78-D, no.3, pp.290--294, March 1995
- J3 S. Chinveeraphan, A. B. C. Zidouri, and M. Sato, "Modified Minimum Covering Run Expression of Binary Document Images," IEICE Trans. Inf. & Syst., vol. E78-D, no.4, pp.503--507, April, 1995
- J4 A. Zidouri, S. Chinveeraphan, and M. Sato, "Recognition of Machine Printed Arabic Characters and Numerals Based on MCR" IEICE Trans. Inf. & Syst., vol. E78-D, no.12 pp. 1649--1655, Dec. 1995
- J5 A. Zidouri, K. Nako, R. Takamatsu, and M. Sato, "A New Character Segmentation Method for Handwritten Documents Based on Multi-scale Analysis", IIEEJ Journal, vol. 24, no. 3, pp. 216--223, March 1995. (In Japanese).
- J6 M. Sarfraz, A. Zidouri and S. A. Shahab, "Towards Skew Estimation of Document Images in OCR System", International Journal of Pattern Recognition and Machine Intelligence, International Scientific, Vol. 01(2), 47-56, ISSN 1817-3632, 2006.
- J7 A. Zidouri, "ORAN System: a basis for an Arabic OCR", The Arabian Journal for Science and Engineering, King Fahd University of Petroleum and Minerals, Dhahran Saudi Arabia, Vol. 31 - 1B, April, 2006.
- J8 K. Mahmood, A. Zidouri and A. Zerguine, "Performance analysis of a RLS-based MLP-DFE in time-invariant and time-varying channels" Digital Signal Processing, Volume 18, Issue 3, May (2008) P. 307-320.
- J9 A. Alawami, A. Zerguine, L. Cheded, A. Zidouri and W. Saif "A New Modified Particle Swarm Optimization Algorithm for Adaptive Equalization", Digital Signal Processing, Volume 21, Issue 2, Pages 195-207, March 2011.
- J10 A. Zidouri, "On Multiple Typeface Arabic Script Recognition", Research Journal of Applied Sciences, Engineering and Technology, Maxwell Science Publication, Volume 2, Issue 5, pp: 428-435, 2010.
- J11 A. Zidouri, "Convergence Analysis of a Mixed l_2 - l_p Adaptive Algorithm", EURASIP Journal on Advances in Signal Processing, vol. 2010, article ID. 893809.
- J12 M. M. U. Faiz, A. Zerguine and A. Zidouri, "The Signed Regressor Least Mean Fourth (SRLMF) Adaptive Algorithm" Eur. J. Adv. Signal Process., vol. 2011, Article ID 373205, pp. 1--12, 2011, doi:10.1155/2011/373205.(2011)

- J13 I. Naveed N. Dhahir A. Zerguine and A. Zidouri “Adaptive Frequency-Domain RLS DFE for Uplink MIMO SC-FDMA” in IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY, vol. PP, issue 99. DOI: 10.1109/TVT.2014.2349955, 2014
- J14 Y. Elarian, R. Abdel-Aal, M. T. Parvez, I. Ahmed, and A. Zidouri “Handwriting Synthesis: A Survey” in International Journal of Document Analysis and Recognition (IJ DAR), vol. 17, No. 4, pp: 455-469, 2014
- J15 Y. Elarian, I. Ahmad, S. Awaida, W. Al-khatib, A. Zidouri “An Arabic Handwriting Synthesis System” Pattern Recognition vol. 48 No. 3, pp: 849-861, 2015
- J16 A. M. Al Omour, A. Zidouri, N. Iqbal and A. Zerguine “Filtered-X Least Mean Fourth (FXLMF) and Leaky-FXLMF Adaptive Algorithms” accepted, EURASIP Journal on Advances in Signal Processing, SPECIAL ISSUE, 2016
- J17 K. Akande, N. Iqbal, A. Zerguine, N. Al-Dhahir and A. Zidouri “Frequency Domain Soft-Constraint Multimodulus Blind Equalization for Uplink SC-FDMA”, Accepted, EURASIP Journal on Advances in Signal Processing, 2016
- J18 Yousef Elarian, Irfan Ahmad, Abdelmalek Zidouri and Wasfi G. Al-Khatib, “LUCIDAH Ligative and Unligative Characters in a Dataset for Arabic Handwriting” International Journal of Advanced Computer Science and Applications(IJACSA), 10(8), 2019. <http://dx.doi.org/10.14569/IJACSA.2019.0100855>
- J20 G. A. Ba Khadher, A. Zidouri and A. H. Muqaibel “UWB SAR for FOPEN imaging using CP-based OFDM and random noise waveforms” International Journal Wireless Information Network. (Under review) 2020.
- J20 M. Eltay A. Zidouri and I. Ahmad “Models of Arabic Handwriting Recognition Using Deep Learning Neural Networks.” IEEE Access, (Under Review), Feb. 2020.

Patents:

Patents Accepted:

Title: “Frequency Domain Soft-Constraint Multimodulus Blind Equalization for Uplink SC-FDMA”

Authors: A. Zerguine, N. Iqbal, A. Zidouri and K. Akande

Docket number: 2015-157

Patent number: US10212007

Title: “Single carrier frequency division multiple access communication system”

Authors: A. Zerguine, A. Zidouri, N. Iqbal and K. Akande

Docket number: 2015-157-03

Patent number: US10432438

Title: “Apparatuses and methodologies for blind equalization in a communication system”

Authors: K. Akande, N. Iqbal, A. Zerguine, and A. Zidouri

Patent number: US20170155498A1

Title: “Single carrier frequency division multiple access communication system”

Authors: K. Akande, N. Iqbal, A. Zerguine, and A. Zidouri

Patent number: US20190081830A1

Patents filed:

Title: "Filtered-X Least Mean Fourth (FXLMF) and Leaky-FXLMF Adaptive Algorithms"

Authors: Ali M Al Omour, Abdelmalek Zidouri, Naveed Iqbal and Azzedine Zerguine

Submitted to the KFUPM Intellectual Assets Office.

Title: "Adaptive Frequency-Domain RLS DFE for Uplink MIMO SC-FDMA"

Authors: N. Iqbal, A. Zerguine, and A. Zidouri

Submitted to the KFUPM Intellectual Assets Office.

Book Chapters:

BC1 A. Zidouri, S. Chinveeraphan, and M. Sato, “Structural Features by MCR Expression Applied to Printed Arabic Character Recognition”, Lecture Notes in Computer Science, Image Analysis and Processing, Springer Berlin/Heidelberg, ISBN: 978-3-540-60298-4, 1995

- BC2 M. Sarfraz, A. Zidouri and S. A. Shahab, "A Novel Approach for Skew Estimation of Document Images in OCR System", Computer Graphics, Imaging and Visualization – New Trends, Sarfraz, M., Wang, Y., and Banissi, E. (Eds.), ISBN: 3-7695-2392-7, IEEE Computer Society, USA, 175-180, 2005.
- BC3 M. Sarfraz, A. Zidouri and N. Nawaz, "On Offline Arabic Character Recognition", Computer-Aided Intelligent Recognition Techniques and Applications. John Wiley & Sons, Ltd ISBN: 0-470-09414-1, pp: 1-17, 2005.

Conference & Workshop Publications

- C1 A. Zidouri, S. Chinveeraphan, and M. Sato, "A Stroke Index For Document Image Analysis Based on The MCR Expression Method," in Proc.MVA'92 IAPR Workshop on Machine Vision Applications, (Tokyo), pp.503--506, Dec.7--9 1992.
- C2 A. Zidouri, S. Chinveeraphan, and M. Sato, "Classification of Compound Document Image Patterns by MCR Stroke Index," in Proc. ICDAR'93 2nd Int. Conf. Document Analysis and Recognition, (Tsukuba), pp.753--756, Oct.20--22 1993.
- C3 A. Zidouri, S. Chinveeraphan, and M. Sato, "Arabic Character Recognition based on MCR", in Lecture Notes in Computer Science, Image Analysis Applications and Computer Graphics, pp.512-513, Volume 1024/1995. 10.1007/3-540-60697-1.
- C4 S. Chinveeraphan, A. Zidouri, and M. Sato, "Stroke Representation by Modified MCR Expression as a Structural Feature for Recognition," in Proc. IWFHR—IV @ 4th Int. Workshop on Frontiers of Handwriting Recognition, (Taipei), pp.11--19, Dec.7--9 1994
- C5 S. Chinveeraphan, A. Zidouri, and M. Sato, "Stroke Extraction as a Basis for Structural Analysis of Document Images by Modified MCR Expression," in Proc. MVA'94 IAPR Workshop on Machine Vision Applications, (Tokyo), pp.135--138, Dec.13--15 1994.
- C6 A. Zidouri, S. Chinveeraphan, and M. Sato, "Structural Features by MCR Expression Applied to Printed Arabic Character Recognition" in 8th Int. Conf. on Image Analysis and Processing}, (San Remo Italy), pp.557--562, Sept. 13-15 1995.
- C7 A. Zidouri, "A Structural Description of Binary Document Images: Application for Arabic Character Recognition" Proceedings CISST'2001, Las Vegas Nevada, June 25-28, pp: 458-464, 2001
- C8 A. Zidouri and M. Sarfraz, "On Optical Character Recognition of Arabic Text", The 6th Saudi Engineering Conference, KFUPM, Dhahran, December 2002, Vol. 4. pp.109-118.

- C9 A. Zidouri, "ORAN: Offline Recognition of Arabic characters and Numerals ", International Conference: Sciences of Electronic, Technologies of Information and Telecommunications, Susa, Tunisia, March 17-21, 2003
- C10 A. Zidouri, "Powerful Tool for Arabic Document Understanding", The First GCC Industrial Electrical & Electronics Conference. Manama, Bahrain, May 2003
- C11 A. Zidouri, M. Deriche, M. Al-Otaibi, M. Al-Shahrani, M. Al-Mutairi, T. Al-Maleki, S. Al-Ghunaim, A. Al-Nutaifi, H. Al-Issa, F. Al-Anazi, "Design of an LED-Based Message Board" IEEE Saudi Arabian Section 10th Technical Exchange Meeting Dhahran, Saudi Arabia, , proceedings on CD Session V, VLSI & Electronics. pp. 1-4, March 23-24 2003
- C12 A. Zidouri, M. Sarfraz, S. N. Nawaz, and M. J. Ahmad, "PC Based Offline Arabic Text Recognition System", Seventh International Symposium on Signal Processing and its Applications, PARIS July 2003, France
- C13 M.J. Ahmed, M. Sarfraz, A. Zidouri and W.G. Al-Khatib, "License Plate recognition system" ICECS'2003, 10th IEEE International Conference on Electronics, Circuits and Systems 14-17 pp. 898- 901 Vol.2. Dec. 2003 Sharjah, United Arab Emirates
- C14 S. N. Nawaz, M. Sarfraz, A. Zidouri and W.G. Al-Khatib, "An approach to Offline Arabic Character Recognition System" ICECS'2003, 10th IEEE International Conference on Electronics, Circuits and Systems 14-17 pp. 1328- 1331 Vol.3. Dec. 2003 Sharjah, United Arab Emirates
- C15 A. Zidouri, "ORAN: A basis for an Arabic Character Recognition System" 2004 International Symposium on Intelligent Multimedia, Video & Speech Processing The Hong Kong Polytechnic University Hong Kong October 20-22, 2004
- C16 A. Zidouri, "Feature Index for Document Image Analysis" The second GCC Industrial Electrical & Electronics Conference, 23-25 Nov. 2004 Manama, Bahrain
- C17 A. Zidouri, M. Sarfraz, S. A. Shahab and S. M. Jafri "Adaptive dissection based subword segmentation of printed Arabic text" The 9th International Conference on Information Visualisation IV'05 6-8 July, London, ISBN ~ ISSN: 1550-6037, 0-7695-2397-8, pp: 239-243, 2005.
- C18 M. Sarfraz, A. Zidouri, and S. A. Shahab, "A Novel Approach for Skew Estimation of Document Images in OCR System" IEEE proceedings of the International Conference on Computer Graphics, Imaging and Vision (CGIV'05), ISBN: 0-7695-2392-7, pp: 175-180, 2005.
- C19 A. Zidouri, "PCA-based Arabic Character Feature Extraction", ISSPA-2007, Sharjah, UAE, 12-15 February, 2007.

- C20 A. T. Al-Awami, W. Saif, A. Zerguine, A. Zidouri, and L. Cheded “Adaptive Equalization Using Particle Swarm Optimization” ISSPA-2007, Sharjah, UAE, 12-15 February, 2007.
- C21 M. Deriche, A. Zidouri, “Recognition of GCC License Plates using Template Matching” in Proc. 5th Congress of Scientific Research Outlook & Technology Development in the Arab World (SRO5), Morocco, Nov., 2008.
- C22 A. Zidouri, M. Deriche, “Recognition of Arabic License Plates using Neural Networks”, in international Workshop on Image Processing Theory, Tools and Applications, IPTA 08, Tunisia, Nov, 2008.
- C23 M. M. U. Faiz, A. Zerguine and A. Zidouri, “The Signed Regressor Least Mean Fourth (SRLMF) Adaptive Algorithm” ISSPA’10, May 10-13, pp: 333-336, Kuala Lumpur, Malaysia, 2010.
- C24 A. Zidouri, “Convergence Analysis of a Mixed l_2 - l_p Adaptive Algorithm”, Proceedings of the 18th European Signal Processing Conference (EUSIPCO-2010) Aalborg, Denmark, August 23-27, pp: 1733-1736, 2010
- C25 A. Zidouri, "A Novel Adaptive Scheme for Channel Estimation" The 11th International Conference on Information Sciences, Signal Processing and their Applications, ISSPA'12, July 2-5, pp: 673-676, Montreal (Quebec), Canada, 2012.
- C26 S. Al-Bawri, A. Zidouri "Single Base Station Mobile-Based Location Estimation Technique" Proceedings of the 4th International Conference on Computing and Informatics, ICOCI Malaysia, 2013.
- C27 Samir Al-Bawri, Abdelmalek Zidouri "Mobile-Based Location Estimation Using Single Base Station" ICWN'13 - The 2013 International Conference on Wireless Networks. Las Vegas, 2013.
- C28 Y. Elarian, A. Zidouri and W. Al-khatib “Ground-truth and Metric for the Evaluation of Arabic Handwritten Character Segmentation” 14th International Conference on Frontiers in Handwriting Recognition, Greece, Sept. 2014.
- C29 Y. Elarian, I. Ahmad, S. Awaida, W. Al-Khatib and A. Zidouri. “Arabic Ligatures: Analysis and Application in Text Recognition” 13th IAPR, ICDAR 2015, August, Nancy, France. 2015.
- C30 G. BaKhader and A. Zidouri, “OFDM Synthetic Aperture Radar based on Fractional Fourier Transform” 13th International Multi-Conference on Systems, Signals & Devices, Conference on Communication, Signal Processing & Information Technology, March 21-24, Leipzig, Germany. 2016.

- C31 G. BaKhader, A. Zidouri and A. Muqaibel “UWB Cyclic Prefix-based OFDM Synthetic Aperture Radar for Foliage Penetration” 15th International Multi-Conference on Systems, Signals & Devices, Conference on Communication, Signal Processing & Information Technology, Hammamet, March 19-22, Tunisia. 2018.
- C32 M. Eltay and A. Zidouri, “Arabic Handwriting Recognition Based on a Multi-stage Deep Neural Network” 4th International Conference On Machine Vision And Machine Learning (MVML'18), August 21 - 23, 2018, Madrid, Spain. (Accepted).
- C33 M. Eltay and A. Zidouri, “Multi-stage Recurrent Neural Network for Arabic Handwriting Recognition” The 12th International Conference on Machine Vision (ICMV 2019) Amsterdam, the Netherlands, November 16-18, 2019. (Accepted).