

# سيدة ذاتية

الأستاذ الدكتور / ممدوح إبراهيم فؤاد فهمي  
أستاذ متفرغ بقسم الهندسة الكهربائية، كلية الهندسة، جامعة أسيوط

○ بيانات الاتصال:

- تليفون المكتب: 01048
- الموبايل : 01000019226
- تليفون المنزل: 2333535
- البريد الإلكتروني: mamdouh.fahmy@eng.au.edu.eg

○ المؤهلات العلمية:

- دكتوراه في الهندسة الكهربائية، كلية الهندسة، بريطانيا، 1974
- بكالوريوس في الهندسة الكهربائية، كلية الهندسة، جامعة أسيوط، 1964

○ الدرجات العلمية :

- أستاذ متفرغ بقسم الهندسة الكهربائية، كلية الهندسة، جامعة أسيوط، 2003
- أستاذ بقسم الهندسة الكهربائية، كلية الهندسة، جامعة أسيوط، 1984
- أستاذ مساعد بقسم الهندسة الكهربائية، كلية الهندسة، جامعة أسيوط، 1978
- مدرس بقسم الهندسة الكهربائية، كلية الهندسة، جامعة أسيوط، 1974
- مدرس مساعد بقسم الهندسة الكهربائية، كلية الهندسة، جامعة أسيوط، 1972
- معيد بقسم الهندسة الكهربائية، كلية الهندسة، جامعة أسيوط، 1964

○ المناصب الإدارية :

المناصب السابقة : رئيس قسم الهندسة الكهربائية

○ المجالات البحثية: Electrical Engineering

ابحاث :

- 1-M. F. Fahmy, G. M. Abdel Raheem, U. S. Mohammed and Omar. M. Fahmy, A Enhanced Fast Wavelet-based iterative blind deconvolution algorithm, Cairo, Egypt, 2012
- 2-M. F. Fahmy and G. F. Fahmy, Image Compression Using Exponential B-spline Functionsalgorithm, Cairo, Egypt, 2012
- 3-M. F. Fahmy, G. M. A. Raheem, U. S. Mohammed, O. M. Fahmy, A New Fast Iterative Blind Deconvolution Algorithm, Signal & Information Processing (JSIP), 2012
- 4-M. F. Fahmy, G. M. A. Raheem, U. S. Mohammed, O. M. Fahmy, An Enhanced Iterative Blind Deconvolution Algorithm, TUWien, Vienna, Austria, 2012
- 5-M. F. Fahmy, G. M. Abdel Raheem, U. S. Mohammed and Omar, A Fast Iterative Blind Image Restoration Algorithm, Cairo, Egypt , 2011
- 6-M. F. Fahmy, U. S. Mohammed and N. A. Saleh, A new technique for blind source separation for linear and nonlinear mixture, Circuit Theory and Appl, 2011
- 7-M. F. Fahmy, G. M. Abdel Raheem, U. S. Mohammed and Omar, M. Fahmy,' A Fast ICA-based iterative blind deconvolution algorithm, Turkey, August , 2011
- 8-M. F. Fahmy, O. M. Fahmy and G. F. Fahmy, Nonblind and Quasiblind Watermark Extraction of Watermarked Natural Preserve Transform Images, Advances in Signal Processing, 2010
- 9-M. F. Fahmy, U. S. Mohammed and N. A. Saleh, A new blind source separation for linear mixture, Assiut, Egypt, 2010
- 10-M. F. Fahmy, U. S. Mohammed and N. A. Saleh, A new technique for blind source separation for post nonlinear mixture, Luxor, Egypt, 2010
- 11-M.F. Fahmy, G. Abdel Raheem, U. S. Mohamed+ , Omar F. Fahmy and G. F. Fahmy, Natural preserving transform watermarking technique, Cairo, Egypt, 2009
- 12-M. F. Fahmy, O. M. Fahmy and G. M. Fahmy, A quasi blind watermark extraction of watermarked natural preserve transform images, Cairo, Egypt , 2009
- 13-M. F. Fahmy, G. M. Fahmy and O. M. Fahmy, Bspline wavelets in signal de-noising and image compression, Signal, Image and Video Processing, 2009
- 14-M.F. Fahmy, G. Abdel Raheem, U. S. Mohamed+ and Omar F. Fahmy, B\_spline wavelet bases and its application in signal de-noising, Tanta, Egypt, 2008

- 15-M.F. Fahmy, G. Abdel Raheem, U. S. Mohamed+, Omar F. Fahmy and G. F. Fahmy, Denoising and image compression using Bspline wavelets, Sarayavio, Bosnia, 2008
- 16-M.F. Fahmy, G. Abdel Raheem, U. S. Mohamed, Omar F. Fahmy and G. F. Fahmy, Watermarking via Bspline expansion and natural preserving transforms, Herzegovina, 2008
- 17-M. F. Fahmy, T. K. Abdel Hameed and G. F. Fahmy, A Fast B\_spline based Algorithm for Image Zooming and Compression, Cairo, Egypt, 2007
- 18-M. F. Fahmy, G. M. Abdel\_Raheem, O. S. Mohammed and Omar M. Fahmy, A B\_spline based Image Compression and Watermarking Technique, Cairo, Egypt, 2007
- 19-M. F. Fahmy and Y. M. Y. Hasan, Image Compression Via Orthogonal Space Decomposition, Menoufia .Egypt, 2006
- 20-M. F. Fahmy and G. F. Fahmy, A New Signal Compression Algorithm Using Allpass Extraction and Its Use in Image Compression and Coding, Vancouver, Canada, August , 2006
- 21-M. F. Fahmy and Y. M. Y. Hasan, Orthogonal signal decomposition with applications to wavelet de noising, Cairo, Egypt, 2005
- 22-M. F. Fahmy and Y. M. Y. Hasan, A Novel Scheme for Compact Orthogonal Modified-Prony Representation of Signals, Athens, Greece, 2005
- 23-M. F. Mohamed. Fahmy, M. F., Y. M. Y. Hasan, Orthogonal signal decomposition with applications in wavelet denoising, Radio Science Conference NRSC 2005, IEEE, NULL, NULL, NULL, 2005
- 24-M. F. Fahmy, Osama M. H. Amin, Y. M. Y. Hasan and G. M. A. El\_Raheem, A Fast Wavelet Packet-based blind signal separation, Cairo, Egypt, 2004
- 25-M. F. Fahmy, Osama M. H. Amin , Y. M. Y. Hassan and G. M. A. El-Raheem, Blind source separation using time frequency distribution, Cairo, Egypt, 2004
- 26-M. F. Fahmy and Y. M. Y. Hasan, Signal de-noising using Hankel matrix rank reduction, Cairo, Egypt, 2004
- 27-M. F. Fahmy, Osama M. H. Amin , Y. M. Y. Hassan and G. M. A. El-Raheem, Blind source separation using time frequency concepts, Rome, Italy, 2004
- 28-M. F. Fahmy, G. M. El-Raheen and A. F. Ibrahim, Applications of adaptive lfeedback line enhancer in signal and image enhancement, Cairo, Egypt, 2003

- 29-Y. M. Yaseen , G. M. El-Raheen and M. F. Fahmy, On the design of cosine modulated filter banks, Cairo, Egypt, 2003
- 30-M. F. Fahmy, Osama M. H. Amin and G. M. A. El\_Raheem, Fast Wavelet-based blind signal separation, Darmstadt , Germany, 2003
- 31-M. F. Fahmy and Y. M. Y. Hasan, Design of Biorthogonal Wavelets with Minimum Entropy, Darmstadt , Germany, 2003
- 32-M. F. Fahmy , G. A. El-Raheem, A fast second order signal separation algorithmwith on-line capabilities, Circuit Theory and Applications, Vol. 30, pp. 425-439, 2002
- 33-M. F. Fahmy , G. A. El-Raheem, On the Design of Biorthogonal Wavelets with Arbitrary Characteristics, Cairo, Egypt., 2002
- 34-M. F. Fahmy and G. M. El-Raheem, The lifting theorem and the design of biorthogonal filter banks, Toulouse, France, pp.535-538, 2002
- 35-M. F. Fahmy , G. M. El-Raheem, Y. M. Yassen and A. A. Sommia, The lifting theorem and the choice of best basis signal compression, Alexandria. Egypt, 2002
- 36-M. F. Fahmy, G. M. El-Raheen and A. F. Ibrahim, Performaance and design of adaptive cross coupled feedback line, ISSPIT02, Marocoo, 2002
- 37-M. F. Fahmy , G. A. El-Raheem , R. S. El-Gohary and A. A. Somyia, A Fast on-line signal separation Algorithm, Mansoura.Egypt, 2001
- 38-M. F. Fahmy and G.M.El-Raheem, Fast on-line signal separation with maximum output power constraint, IEEE ISPACS, 2001
- 39-A. I. Saleh, M. F. Fahmy, G. M. El-Raheem and G. M. Fahmy, On the design of two channel perfect construction QMf, Circuit Theory and Appl, Vol 28, no.3, pp. 209-224, 2000
- 40-M. F. Fahmy, G. M. El-Raheem and A. A. Abdel-Sallam, Signal separation using second and high-order statistics, Circuit Theory and Appl, Vol 28, no.3, pp. 225-243, 2000
- 41-M. F. Fahmy, G. M. El-Raheem and A. A. Abdel-Sallam, Signal separation using second order statistics, European conference , 1999
- 42-M. F. Fahmy, G. M. El-Raheem and A. A. Abdel-Sallam, Two rapidly convergent algorithms for signal separation, IEEE Symp, 1999
- 43-A. I. Saleh, M. F. Fahmy, G. M. Raheem and G. F. Fahmy, Design of two channel IIR QMF filters with smooth wavelet functions, European conference , 1999

- 44-M. F. Fahmy, G. M. El. Raheem and H. M. Badr, A Novel method for the design of maximally decimated pairwise M-bank filters, European conference , 1999
- 45-M. F. Fahmy, G. M. El-Raheem and A. A. El-Sallam, System Identification using High Order Statistics, Cairo, Egypt, 1999
- 46-N. A. El-Gayed, M. Abdel-Rahman and M. F. Fahmy, Iterative Design of Two-Channel IIR Perfect Construction QMF Filters, Circuit Theory & Applications, Vol. 26, pp. 453-462, 1998
- 47-M. F. Fahmy, G. M. El-Raheem and A. A. Abdel-Sallam, A rapidly convergent system identification algorithm using high-order statistics, Cairo, Egypt, 1998
- 48-M. F. Fahmy, G. El-Raheem and M. Abo-Zahhad, Synthesis of Fixed-point Low Roundoff Noise Digital Filters with No Limit-Cycle, Circuit Theory & Applications, Vol. 23, No. 3, pp. 253-255, 1995
- 49-M. F. Fahmy, G. El-Raheem and H. M. Ibrahim, A Recursive Least Squares Algorithm for Orthogonal IIR Adaptive Line Enhancer, Circuit Theory & Applications, Vol. 23, No. 5, pp. 501-514, 1995
- 50-M. F. Fahmy, G. El-Raheem and T. I. Haweel, Adaptive Speech Enhancement Using Discrete Legendre Functions, Engineering, Assiut University, Vol. 22, No. 1, 1994
- 51-M. F. Fahmy, Y. M. Yassein, G. El-Raheem and N. El-Gaied, Design of Linear Phase IIR Digital Filters from FIR Specifications, IEEE Trans, Vol. 42, No. 2, pp. 437-440, 1994
- 52-M. F. Fahmy, Y. M. Yassein, G. El-Raheem and T. I. Heweel, Design of Fixed-point State Space Digital Filters with Low Roundoff Noise, Circuit Theory & Applications, Vol. 22, No.1, pp. 3-13, 1994
- 53-M. F Fahmy and G. El-Raheem,, Synthesis of Fixed-point Low-Roundoff Noise Digital Filters with No Limit-Cycle Oscillations, IEEE Symp, pp. 480-485 , 1994
- 54-M. F. Fahmy, M. Abo-Zahhad and G. El-Raheem, Design of Two-Dimensional Scaled state-space Digital Filters with Fixed-point Arithmetics, Circuit Theory , Vol. 22, No.6 , pp.467-477, 1994
- 55-M. F. Fahmy, T. I. Heweel, G. El-Raheem and R. R. Gharieb, System Identification Using Discrete Orthogonal Functions, Circuit Theory & Appl, Vol. 21, No.4 , pp. 317-329, 1993

- 56-M.F. Fahmy, M.M. Doss and F. Abdel-Fattah, Low sensitivity SC simulation of reactance E-type zero producing section, IEEE Trans. on Circuits and Systems, vol. 39(I), No.1, pp. 59-63, 1992
- 57-M. F. Fahmy, A. El-Wardaney and K. M. Shaaban, Time Domain Analysis of Switched Networks Containing Periodically Operated Switches, IEEE Trans, Vol-39, NO. 3, pp. 243-247, 1992
- 58-M. F. Fahmy, G. El-Raheem and R. R. Gharieb, IIR Adaptive Filters Using Discrete Orthogonal Functions, IEEE Symp, 1992
- 59-M.M. Doss, A. El-Wardaney, G.M. Abd-Raheem and M.F. Fahmy, Switched-capacitor synthesis via all-pass extractions, Proc. ECCTD-91, Copenhagen, Denmark, pp. 948-957, 1991
- 60-M. F. Fahmy , A. El-Wardaney ,N. El-Gaied and M.I.Sobhy, Time Domain Analysis and Design of Wave Digital Filters with Sampling Rate Alteration, Circuit Theory & Appl, Vol. 19, No. 2, pp. 145-160, 1991
- 61-M. F. Fahmy , A. El-Wardaney and N. El-Gaied, Block Implementation of Wave Digital Filters, European Conference , pp. 177-186 , 1991
- 62-M. F. Fahmy, A. El-Wardaney, G. El-Raheem and F. A .Fattah, Low Sensitivity SC-Realization of Brune & C-type Reactance Sections, Circuit. Theory & Appl, Vol. 19, No. 5, pp. 459-470, 1991
- 63-M. Abo-Zahhad, T. Henk and M. F. Fahmy, Design of Digital Sampled-Data and Non-Reciprocal Lumped Lowpass Filters with Constant Amplitude and Linear Phase Characteristics, AL-AZHAR Engineering Second International Conf, pp.121-132, 1991
- 64-M. Abo-Zahhad, T. Henk and M. F. Fahmy, Design of Digital Filters with Arbitrary Amplitude and Phase Characteristics, AL-AZHAR Engineering Second International Conf, pp. 76-96, 1991
- 65-M. F. Fahmy, G. El-Raheem ,M Abo-Zahhad, Y. El-Sawy and M.I.Sobhy , Parallel Algorithm for Solving Nonlinear Networks, IEEE Symp, pp. 930-932, 1990
- 66-M. F. Fahmy, M. Abo-Zahhad and M.I.Sobhy, Design of Odd Degree Linear Phase Switched-Capacitor Filters with Equiripple Amplitude Response, Circuit Theory & Appl, Vol. 17, No. 1, pp. 87-101, 1989

- 67-M. F. Fahmy, A. El-Wardaney, N. El-Gaied and M. I. Sobhy, Design of Very Narrow Band Filters Using Sampling Rate Alteration, IEEE Int. Symp, pp. 1459-1462, 1989
- 68-M. F. Fahmy, M. Abo-Zahhad and M.I.Sobhy, Low Sensitivity Linear Phase Switched Capacitor Filters with Controlled Group Delay, European Conference , pp. 280-283 , 1989
- 69-M. F. Fahmy, A. El-Wardaney, N. A. El-Gayed and M. I. Sobhy, Design of very narrow band filters using sampling rate alternations, Proc. of the IEEE International Symposium on Circuits and Systems, Vol. 2, pp. 1459- 1461, Portland, May 1989. , NULL, NULL, NULL,  
[http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=100632&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxpls%2Fabs\\_all.jsp%3Farnumber%3D100632](http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=100632&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxpls%2Fabs_all.jsp%3Farnumber%3D100632), 1989
- 70-M. F. Fahmy, M.Abo-Zahhad and M.I.Sobhy, Design of Selective Linear Phase Bandpass Switched Capacitor Filters with Equiripple Pass-band Amplitude Response, IEEE Trans, No.10, pp. 1220-1229, 1988
- 71-M. F. Fahmy, M.Y.Makkey and M.I.Sobhy, Compensation for Amplifier Finite Bandwidth in the Design of Switched-capacitor Networks, IEEE Int. Symp, pp. 2471-2475, 1988
- 72-M.F. Fahmy, M.Y. Makky and M.M. Doss, A method for frequency domain analysis of switched-capacitor filters, IEEE Trans. on Circuits and Systems, vol. CAS-34, pp. 955-960, 1987
- 73-M.F. Fahmy, M.M. Doss and M.Y. Makky, Minimum phase selective bandpass digital filters with controlled pass-band loss and delay, Proc. of the Second ASAT, Cairo, Egypt , pp. 1063-1068, 1987
- 74-M. F. Fahmy, M.Y.Makkey and M.I.Sobhy, Time and Frequency Analysis of Non Ideal Switched Capacitor Circuits, European Conference , pp. 83-88, 1987
- 75-M. F. Fahmy, M. Abo-Zahhad and M.I, Selective Linear Phase Bandpass Digital Filters with Equiripple Loss Response, European Conference , pp. 145-150 , 1987
- 76-M. F. Fahmy, Bandpass Digital Filters with Arbitrary Phase and Group Delay, Koyto , Japan, 1985
- 77-M.Y.Makkey and M. F. Fahmy, Digital Bandpass Filters with Maximally Flat Amplitude and Delay Responses, IEEE Trans, No.6 , pp. 598-600 , 1985
- 78-M.Y.Makkey, M. F. Fahmy and M.I.Sobhy, Selective Minimum Phase Constant Delay Digital Filters, European Conference , pp. 519-521, 1985

- 79-M. F. Fahmy, Bandpass Digital Filters with Arbitrary Phase Response, European Conference , pp. 522-524, 1985
- 80- M. F. Fahmy, Constant Delay Bandpass Filters by Derivative Adjustements, IEEE Symposium on Circuits, pp. 298-300, 1983
- 81-A.I.Saleh and M. F. Fahmy, Design of Recursive Digital Filters through the Use of Discrete Exponentials, European Conference , 1983
- 82-M. F. Fahmy and M.I, 2 D Digital Filters with Guaranteed Stability, IEEE Trans, No.4, pp. 246-251, 1982
- 83-M. F. Fahmy and A.I.Saleh , Phase-Frequency Approximation in System Model Reduction , Optimization, pp. 805-813 , 1982
- 84-M. F. Fahmy , Double Sided Pade'Approximants and the Stability of 1 D Recursive Filters , Circuit Theory & Appl, Vol. 9 , pp. 595-600, 1981
- 85-M. F. Fahmy and M.I.Sobh, Design of 2-D Digital Filters with Guaranteed Stability, European Conference on Circuit Theory, pp. 601-605 , 1981
- 86-M. F. Fahmy and M.I.Sobhy, Selective Constant Delay Filters with Chebychev Passband Amplitude Response, Circuit. Theory & Appl, Vol. 8 , pp. 190-194, 1980
- 87-M. F. Fahmy, The Use of Pade' Approximants in the Derivation of Distribute Lowpass Filters with Simulatenous Amplitude & Delay, Circuit Theory & Appl, Vol. 8 , pp. 197-204, 1980
- 88-M. F. Fahmy , Transfer Functions with Arbitrary Phase Characteristics, Circuit Theory & Appl, Vol. 7 , pp. 21-29 , 1979
- 89-M. F. Fahmy , On the Problem of Filters with Arbitrary Amplitude and Phase Constraints, Circuit Theory & Appl. , Vol. 5 , pp. 93-101, 1977
- 90-M. F. Fahmy , Generalized Bessel Polynomials with Applications to the Design of Bandpass Filters with Approximately Flat Group Delay, Circuit Theory & Appl, Vol. 5, pp. 337-342, 1977
- 91-M. F. Fahmy, Maximally Flat Nonrecursive Digital Filters , Circuit Theory & Appl, Vol. 4 , pp. 311-313, 1976
- 92-M. F. Fahmy and J.D.Rhodes, Finite Band Approximation for Distributed and Digital Selective Linear Phase Transfer Functions, Circuit Theory & Appl, Vol. 3, pp. 57-70 , 1975

93-M. F. Fahmy, Digital Realizations of C & D-type Microwave Sections, *Circuit Theory & Appl*, Vol. 3 , pp. 395-402, 1975

94-J.D.Rhodes and M. F. Fahmy, Digital Filters with Maximally Flat Amplitude and Delay Characteristics, *Circuit Theory & Applications*, , Vol. 2, pp.3-11, 1974

95-M. F. Fahmy and J.D.Rhodes, The Equidistant Linear Phase Polynomials for Distributed and Digital Networks, *Circuit Theory & Appl*, Vol. 2 , pp.341-351, 1974

96-M. F. Fahmy and J.D.Rhodes, Proof of the Recurrence Formula for the Distributed Equidistant Linear Phase Polynomials, *Circuit Theory & Appl*, Vol. 3, 1974