



أ.د. عدنان محمدخير الصمادي

a.alsmadi@zu.edu.jo

كلية تكنولوجيا المعلومات/ علم الحاسوب

الرتبة الأكاديمية: أستاذ دكتور

العضويات:

1.	عضو مجلس أمناء جامعة آل البيت، 2013 – 2015
2.	عضو مجلس أمناء جامعة جرش، 2013 - 2017
3.	عضو لجنة الاعتراف بمؤسسات التعليم العالي غير الأردنية ومعادلة شهاداتها، وزارة التعليم العالي والبحث العلمي 2009 – 2015
4.	عضو مجلس مركز الأمير فيصل لتكنولوجيا المعلومات، عمان، 2013-2015
5.	عضو متقدم في جمعية المهندسين الكهربائيين والإلكترونيين العالمية Senior Member of IEEE (Institute of Electrical & Electronic Engineering).
6.	عضو الرابطة الوطنية للتكنولوجيا الصناعية، الولايات المتحدة الأمريكية Member of NAIT (National Association of Industrial Technology), USA
7.	عضو الجمعية الأردنية لخريجي الجامعات والمعاهد الأمريكية.
8.	عضو جمعية مرتبة الشرف (Eta Kappa Nu Honor Society) ، أمريكا
9.	عضو جمعية مرتبة الشرف (Golden Key National Honor Society) ، أمريكا
10.	عضو جمعية تحليل الإشارات الرقمية للمهندسين الكهربائيين والإلكترونيين العالمية، أمريكا
8.	عضو الهيئة الأردنية لدعم الصناعة الوطنية، الأردن.

المؤهلات العلمية:

1.	دكتوراه: الهندسة الكهربائية والحاسوب (مرتبة الشرف)، جامعة فاندربيلت، الولايات المتحدة الأمريكية، 1995.
2.	ماجستير: الهندسة الكهربائية (مرتبة الشرف)، جامعة ولاية تينيسي، الولايات المتحدة الأمريكية، 1990.
3.	بكالوريوس: الهندسة الكهربائية والحاسوب (بدرجة امتياز عالية) ، جامعة ولاية تينيسي، الولايات المتحدة الأمريكية، 1987.



السيرة الذاتية

جامعة الزرقاء - الأردن

الخبرات التدريسية:

1.	2024-9	الآن	أستاذ قسم علوم الحاسوب كلية تكنولوجيا المعلومات جامعة الزرقاء/ الأردن
2.	2010-9	2024-9-28	أستاذ عميد كلية الحجابي للهندسة التكنولوجية 2015-2013 قسم هندسة الإلكترونيات جامعة اليرموك، الأردن
3.	2006-9-2	2010-9-1	عميد كلية تكنولوجيا المعلومات أستاذ قسم علم الحاسوب جامعة آل البيت، المفرق
4.	2002-6-17	2006-9-1	أستاذ مشارك عميد كلية الحجابي للهندسة التكنولوجية 2006-2004 رئيس قسم هندسة الإلكترونيات 2004-2002 جامعة اليرموك، الأردن
5.	1997-9-1	2002-6-17	أستاذ مساعد قسم هندسة الإلكترونيات كلية الحجابي للهندسة التكنولوجية جامعة اليرموك، الأردن
6.	1995-8-2	1997-8-1	أستاذ مساعد رئيس قسم هندسة الطيران والتكنولوجيا الصناعية جامعة ولاية تينيسي الولايات المتحدة الأمريكية
7.	1995-9-2	1997-8-1	محاضر غير متفرغ قسم الهندسة الكهربائية والحاسوب جامعة فاندربيلت الولايات المتحدة الأمريكية
8.	1992-8-2	1995-8-1	مدرس قسم هندسة الطيران والتكنولوجيا الصناعية جامعة ولاية تينيسي الولايات المتحدة الأمريكية
9.	1991-8-2	1992-8-1	مدرس قسم الرياضيات جامعة فيسك الولايات المتحدة الأمريكية
10.	1989-8-1	1991-8-1	مدرس قسم الرياضيات جامعة ولاية تينيسي الولايات المتحدة الأمريكية



الأبحاث المنشورة والمقبولة للنشر:

ت	عنوان البحث	جهة النشر	السنة والإصدار
1.	Artificial Control of Energy Management Pv System	<i>Results in Control and Optimization, Elsevier</i>	Vol. 14, 2024
2.	Considerations for Energy saving and Street Lighting lamps replacement in Jordanian Roads	<i>Przegląd Elektrotechniczny</i>	Vol. 2024, no. 1, 2024.
3.	Estimation of ARMA Model Order Using Artificial Neural Networks	<i>Circuits, Systems & Signal Processing (CSSP)</i>	Vol. 42, July 2023.
4.	A New Technique for ARMA-System Identification Based on QR-Decomposition of Third Order Cumulants Matrix	<i>International Journal of Circuits, Systems and Signal Processing</i>	Vol.15, 2021
5.	Intelligent Street Lighting Energy-Saving System Based on Climate Conditions and vehicle's Movements	<i>Jurnal Kejuruteraan (Journal of Engineering)</i>	Vol. 33, no. 1, 2021.
6.	Model Order Reduction with True Dominant Poles Preservation via Particles Swarm Optimization	<i>Circuits, Systems & Signal Processing (CSSP)</i>	Vol. 39, no. 11, 2020
7.	A Robust Method for the Identification of Non-Gaussian Autoregressive Systems in Colored Gaussian Noise	<i>Transactions of the Institute of Measurement and Control</i>	Vol. 42, no. 13, 2020.
8.	Firefly Artificial Intelligence Technique for Model Order Reduction with Substructure Preservation	<i>Transactions of the Institute of Measurement and Control</i>	Vol. 41, no. 10, 2019.
9.	Diagnostic Analysis of the Power Consumption for Real Time Conditions of the Aluminum Extrusion Process	<i>Journal of Instrumentation and Control Engineering</i>	Vol. 6, No. 4, 2018
10.	Hn PERP: Hop by Hop-Power-Efficient Routing Protocol over Underwater Wireless Sensor Networks	<i>Modern Applied Science</i>	Vol. 12, No.11, 2018.
11.	ARMA Model Parameter Estimation of Non-Gaussian Processes Using QR Factorization	<i>International Journal of Mathematics and Computers in Simulation</i>	Vol. 12, No. 10 2018



Vol. 1, No. 12, 2016	<i>International Journal of Control Systems and Robotics</i>	Dominant-Dynamics-Based Reduced Order Modeling Using Genetic Algorithm	.12
Vol.7, No.3, May 2015	<i>The International Journal of Computer Networks & Communications</i>	A novel Algorithm for TCP Timeout Calculation over Wireless Ad Hoc Networks	.13
Vol. 2, No.4, December 2014	<i>Journal of Engineering Research and Technology</i>	Singular Value Decomposition-Based ARMA Model Parameter Estimation of Non-Gaussian Processes	.14
Vol. 34, pp. 594-603, July 2012	<i>Transactions of the Institute of Measurement and Control</i>	A robust and efficient genetic algorithm for solving a chemical reactor problem: theory, application, and convergence analysis	.15
Vol. 40, no. 4, April 2012	<i>International Journal of Circuit Theory and Applications</i>	Robust Model Order Reduction Technique for MIMO Systems via ANN-LMI-Based State Residualization	.16
Vol. 18, March 2012.	<i>Mathematical and Computer Modelling of Dynamical Systems</i>	ARMA model order and parameter estimation using genetic algorithms	.17
Vol. 20, no. 7, November 2011	<i>Journal of Circuits, Systems, and Computers</i>	Multi-Time-Scale Systems Model Order Reduction via genetic algorithms with Eigenvalue Preservation	.18
Vol. 35, no. 9, September 2011	<i>Applied Mathematical Modelling</i>	Artificial neural network for discrete model order reduction with substructure preservation	.19
Vol. 32, no. 4, July 2011	<i>Optimal Control, Applications and Methods</i>	A Novel Continuous Genetic Algorithm for the Solution of Optimal Control Problems	.20
Vol.17, no. 2, April 2011	<i>Mathematical and Computer Modelling of Dynamical Systems</i>	Genetic algorithm approach with frequency selectivity for model order reduction of MIMO systems	.21
Vol. 88, 2010.	<i>Communications in Computer and Information Science, Springer</i>	Artificial Neural Network-Based Algorithm for ARMA Model Order Estimation	.22
Vol. 3, no.1, January 2010	<i>Recent Patents on Computer Science</i>	A Robust ARX and ARMA Model Order Estimation via Pivot-Neighbors Comparisons	.23



Vol. 35, no. 4, 2009.	<i>Systems Science</i>	ARMA Model Order Estimation of Non-Gaussian Process Using the Determinant of Sub-Matrices of a Third Order Cumulants Covariance Matrix	.24
Vol. 38, no. 1, January 2009	<i>International Journal of General Systems</i>	Automatic Identification of ARMA Processes	.25
Vol. 4, no. 3, 2009	<i>The Ubiquitous Computing and Communication Journal</i>	Detecting Metamorphic Viruses by using Arbitrary Length of Control Flow Graphs and Nodes Alignment	.26
Vol. 26, no. 5, October 2007	<i>Circuits, Systems & Signal Processing (CSSP), Springer</i>	A Least-Squares-Based Algorithm for Identification of Non-Gaussian ARMA Models	.27
Vol. 23, no. 3, September 2007	<i>Engineering with Computers Journal</i>	Space Partitioning in Engineering Design Via Metamodel Acceptance Score Distribution	.28
Vol. 2, no.3, July 2007	<i>Journal of Active and Passive Electronic Devices</i>	Response Enhancement of a Singularly Perturbed System Based on Eigenvalue Assignment	.29
Vol. 3, no. 1, January 2007	<i>International Journal of Signal Processing</i>	Signal Reconstruction Using Cepstrum of Higher Order Statistics	.30
Vol. 51, no. 1, January 2006	<i>Journal of Physics in Medicine and Biology</i>	Extraction of Fetal ECG by Combination of SVD and Neuro-Fuzzy Inference System	.31
Vol. 36, no. 15, December 2005	<i>International Journal of Systems Science</i>	The Estimation of the Order of an ARMA Process Using Third Order Statistics	.32
vol. 10, December 2005	<i>International Journal of Computer Science</i>	Test for Gaussianity of a Stationary Time Series	.33
Vol. 24, no. 6 November 2005.	<i>Circuits, Systems & Signal Processing (CSSP), Springer</i>	ARMA Model Order Determination Using Edge Detection: A New Perspective	.34
Vol. 6, no. 3, November 2005.	<i>International Journal of Engineering Simulation</i>	ARMA Model Order Estimation for Colored Gaussian Noise Based on the Eigenvalues of the Covariance Matrix	.35
Vol. 33, no. 3, May 2005.	<i>International Journal of Circuit</i>	An Efficient Approach for Computing	.36



	<i>Theory and Applications</i>	Non-Gaussian ARMA Model Coefficients Using Pisarenko's Method	
Vol. 85, no. 3, March 2005.	<i>Signal Processing</i>	Cumulant-Based Order Selection of Non-Gaussian Autoregressive Moving Average Models: The Corner Method	.37
Vol. 35, no. 5, October 2004	<i>International Journal of Mathematical Education in Science and Technology</i>	On the Spectrum of Periodic Signals	.38
Vol. 33, no. 6, July 2004	<i>International Journal of General Systems</i>	ARMA Model Order Estimation Using Third Order Computations	.39
Vol. 86, no. 4, July 2004	<i>Electrical Engineering</i>	High-Quality Low-Complexity Wavelet-Based Compression Algorithm for Audio Signals	.40
Vol. 5, no. 1, March 2004.	<i>International Journal of Engineering Simulation</i>	A New Order Determination Technique Based on the Determination of Singularity of Principal Sub-Matrices	.41
Vol. 16, no. 10, December 2003	<i>International Journal of Communication Systems</i>	Study of the Reliability of a Binary Symmetric Channel under Non-Gaussian Disturbances	.42
Vol. 31, no. 6, November 2003	<i>International Journal of Circuit Theory and Applications</i>	Cumulant Based Approach to FIR System Identification	.43
Vol. 32, no. 5, September 2003	<i>International Journal of General Systems</i>	Cumulant-Based Inverse Filters for Blind Deconvolution	.44
Vol. 25, no. 5, September 2001	<i>Journal of Medical Engineering and Technology</i>	Fitting ARMA Models to Linear Non-Gaussian Processes Using Higher Order Statistics	.45
Vol. 29, no. 5, August 2001	<i>International Journal of Circuit Theory and Applications</i>	A New Coefficient Estimation Method for Autoregressive Systems Using Cumulants	.46
Vol. 28, no. 4, August 2000	<i>International Journal of Circuit Theory and Applications</i>	A Robust Recursive Technique for Pole-Zero System Model Order Estimation	.47
Vol. 38, no. 4, November 1995	<i>IEEE Transactions on Education</i>	Simplifying and Extending a Useful Class of Signals and Impulse Responses	.48



المؤتمرات العلمية:

ت	اسم المؤتمر	الجهة المنظمة	عنوان البحث	فترة المؤتمر
1.	25 th International Arab Conference on Information Technology (ACIT)	Zarqa University, Jordan	Intelligent Farm Irrigation and Safety System	December 10-12, 2024
2.	4 rd International Conference on Basic Sciences, Engineering and Technology	International Society for Research in Education and Science	Vehicle Autonomous Driving System	May 2-5, 2024
3.	3 rd International Conference on Basic Sciences, Engineering and Technology	International Society for Research in Education and Science	A Navigation Tool for Visually Impaired and Blind People	April 27 - 30, 2023
4.	9 th IEEE International Conference on Electrical and Electronics Engineering	Gazi University, Turkey	Vehicle Auto Parking System	March 29-31, 2022
5.	17 th IEEE International Multi-Conference on Systems, Signals & Devices	Chemnitz University of Technology	Intelligent Automobile Collision Avoidance and Safety System," (SSD20)	July 20-23, 2020
6.	16 th IEEE International Multi-Conference on Systems, Signals & Devices	Chemnitz University of Technology	Street Lighting Energy-Saving System	March 21-24, 2019
7.	The 2018 International Conference on Circuits, Systems and Signal Processing	Institute for Natural Sciences & Engineering	ARMA Model Parameter Estimation of Non-Gaussian Processes Using QR Factorization	October 6-8, 2018
8.	14 th IEEE International Multi-Conference on Systems, Signals & Devices	Chemnitz University of Technology	Design of Reduced Order Models for Multi-Time-Scale Systems Via Firefly Optimization	March 28-31, 2017
9.	15 th International Conference on Circuits, Systems, Electronics, Control & Signal Processing	World Scientific and Engineering Academy and Society	Model Order Reduction Using Genetic Algorithm	April 15-17, 2016
10.	IEEE International Conference on Electronics, Circuits, and Systems		Intelligent Computational Technique with CGA Approach for Optimal Solutions	December 8-11, 2013



March 4-6, 2013	On the Yule Walker equations for the all-pole coefficients		<i>The Second International Conference on Digital Enterprise and Information Systems</i>	11.
August 26-29, 2012	Artificial neural network for discrete model order reduction with frequency selectivity		<i>Proceedings of the 10th International FLINS Conference on Uncertainty Modeling in Knowledge Engineering and Decision Making</i>	12.
				13.
				14.

الإشراف على الرسائل الجامعية:

ت	اسم الطالب	عنوان الرسالة	الجامعة	السنة
1.	Dr. Khaled Alqawasmi	ARMA model orders and parameters estimation using evolutionary algorithms	Amman Arab University for Graduate Studies	PH.D. 2010
2.	Esraa Garaibeh	Design of Reduced Order Controller for Multi-Time-Scale Power Systems Via Firefly Optimization	Yarmouk University	MS 2016
3.	Mohammad Alma'aitah	Analysis of higher order modeling of inter area power system oscillation using eigenvalue method and model reduction via particle swarm optimization method	Yarmouk University	MS 2016
4.	Mais Marji	Model and Controller Order Reduction of Singularly Perturbed Systems Using Genetic Algorithm	Yarmouk University	MS 2-15
5.	Tariq Rjoub	Energy saving with visually satisfactory street lighting in Jordanian Roads	Yarmouk University	MS 2012
6.	Kawthar Hawamdeh	Improvement of Iris Recognition System Using Fuzzy Segmentation and Neural Network	Al Al-Bayt University	MS 2010
7.	Fedaa Sharedeh	Quality metrics for object-oriented	Al Al-Bayt University	MS



2009		software		
MS 2009	Al Al-Bayt University	Timeout adaptability for TCP retransmission over Ad hoc networks	Tariq Kraishan	.8
MS 2008	Al Al-Bayt University	Preventing software piracy using public key cryptography	Khaldoon Khawaldeh	.9
MS 2007	Yarmouk University	Autoregressive moving average modeling using continuous genetic algorithms	Maha Zaqoot	.10
MS 2005	Yarmouk University	Solution of optimal control problems using continuous genetic algorithms	Ali Al-Asasfeh	.11
MS 2005	Yarmouk University	Collision-free planning of robot manipulator using continuous genetic algorithms	Sufyan Bataineh	.12
MS 2005	Yarmouk University	On-line identification and analysis of the power consumption signal for aluminum extrusion process	Samer As'ad	.13

المعلومات الشخصية:

الاسم	:	أ. د. عدنان محمدخير الصمادي
مكان وتاريخ الميلاد	:	
الجنسية	:	أردني
الحالة الاجتماعية	:	متزوج
عنوان السكن	:	اربد - النعيمه
هاتف العمل	:	05-3821100 00962-5-3821100
الهاتف النقال	:	1353 فرعي
العنوان البريدي	:	ص.ب: 132222 الرمز البريدي: 13132