University of Technology

Control and Systems Eng. Dep.

C.V.

Last update	12/9/2017

Full name:		Assist. Prof. Dr. Omar Farouq Lutfy Sadiq Al-Karkhi		**Photo**
Date of birth :		17th of September 1977	Baghdad-Iraq	(optional)
Nationality :		Iraqi		
Place of work :		Control and Systems Engineering Department		
Languages	**1**	Arabic		
	2	English		
	3			
Mobile(optional):				
E-mail (optional):		60157@uotechnology.edu.iq omarfarouq77@gmail.com		

Administrative Posts					
No.	**Job title**	**University/ Institution**	**Department\Branch**	**From**	**To**
1	Lecturer	University of Technology	Control and Systems Engineering Department	11/10/2003	Until now
2	Administrator of Laboratories Division	University of Technology	Control and Systems Engineering Department	3/9/2012	1/9/2015
3	Administrator of Scientific Committees Division	University of Technology	Control and Systems Engineering Department	16/9/2015	1/1/2017

Academic Degrees				
Degree	**Granting Country**	**University**	**Department**	**Date of Acquisition**
Bachelor	Iraq	University of Technology	Control and Systems Engineering	26/06/2000

Master	Iraq	University of Technology	Control and Systems Engineering	18/02/2003
Doctorate	Malaysia	University Putra Malaysia (UPM)	Electrical and Electronic Engineering Dept.	12/08/2011
Post Doctorate	Malaysia	Universiti Teknologi Malaysia (UTM)	Centre for Artificial Intelligence and Robotics (CAIRO)	6/07/2015

Scientific Ranks	
Scientific Rank	**Date of acquisition**
Assistant Lecturer	11/10/2003
Lecturer	17/12/2006
Assistant Professor	6/9/2015
Professor	

Felids of research interest	**1**	Intelligent Control
	2	Artificial Intelligence
	3	System Identification
	4	Optimization Algorithms
Government / Civil Institutions and Organizations	**1**	
	2	
	3	
Other Activities	**1**	Linguistic Referee for M.Sc. and Ph.D. Theses

Laboratory Skills	
I am teaching in the following laboratories:	C++ Programming Language
	Control Lab.
	Electrical and Electronics Lab.

Engineering Programs Experience	
Operating system	
Programs	
Languages	MATLAB, C++, Basic

Professional Experience
In 24/07/2000, I became a member in the Iraqi Engineers Union.
From 2001 to 2003, I worked as an external lecturer at the Control and Systems Engi Department, University of Technology, Baghdad-Iraq.
In 11/10/2003, I have been appointed as an assistant lecturer at the Control and Systems Engi Department, University of Technology, Baghdad-Iraq.

Published books (up-to-date)			
No.	**Title of book**	**Publisher**	**Date**
	Design of an Intelligent Control System for Conveyor-Belt Grain Dryers: An Application of Soft Computing Techniques in Grain Drying Systems	LAP LAMBERT Academic Publishing	2012

Publication in Local Journals			
No.	**Title of paper**	**Publisher**	**Date**
1	Identification of Nonlinear Systems Based on a Genetically Trained Fuzzy Neural Network	Engineering & Technology Journal	Vol. 4, No. 2, 2004
2	Design of a Neuro-Controller for a Crane Based on Genetic Algorithms	Engineering & Technology Journal	Vol. 23, No. 9, 2004
3	Feedforward Controller for Nonlinear Systems Utilizing a Genetically Trained Fuzzy Neural Network	Engineering & Technology Journal	Vol. 25, No. 3, 2007
4	An Improved Micro Artificial Immune Algorithm Utilizing Employed Honey Bees for the Identification of Nonlinear Systems	Iraqi Journal of Computer, Communication, Control and Systems Engineering	Vol. 16, No. 1, 2016
5	Model Reference Adaptive Control based on A Self-recurrent Wavelet Neural Network Utilizing Micro Artificial Immune Systems	Al-Khwarizmi Engineering Journal	Vol. 13, No. 2, 2017

Publications in ISI Journals with Impact Factor			
No.	**Title of paper**	**Publisher**	**Date**
1	Some Control Strategies in Agricultural Grain Driers: A Review	Journal of Food, Agriculture and Environment (JCR 2007, Impact Factor: 0.232)	Vol. 6, No. 2, 2008, pp. 74-85
2	A Genetically Trained Adaptive Neuro-fuzzy Inference System Network Utilized as a Proportional-Integral-Derivative-like Feedback Controller for Non-linear Systems	Proceedings of the Institution of Mechanical Engineers. Part I: Journal of Systems and Control Engineering (JCR 2008, Impact Factor: 0.322)	Vol. 223, No. 3, 2009, pp. 309-321
3	Neuro-fuzzy Modeling of a Conveyor-belt Grain Dryer	Journal of Food, Agriculture and Environment (JCR 2009, Impact Factor: 0.349)	Vol. 8, No. 3&4, 2010, pp. 128-134
4	Nonlinear Modeling and Control of a Conveyor-belt Grain Dryer Utilizing Neuro-fuzzy Systems	Proceedings of the Institution of Mechanical Engineers. Part I: Journal of Systems and Control Engineering (JCR 2009, Impact Factor: 0.447)	Vol. 225, No. 5, 2010, pp. 611-622
5	A Simplified ANFIS Controller Trained by Genetic Algorithm to Control Nonlinear Multi-input Multi-output Systems	Scientific Research and Essays (JCR 2010, Impact Factor: 0.445)	Vol. 6, No. 31, 2011, pp. 6475-6486
6	Intelligent Control of Grain Drying Process Using Fuzzy Logic Controller	Journal of Food, Agriculture and Environment (JCR 2009, Impact Factor: 0.349)	Vol. 8, No. 2, 2010, pp. 145-149
7	Wavelet Neural Network Model Reference Adaptive Control Trained by a Modified Artificial Immune Algorithm to Control Nonlinear Systems	The Arabian Journal for Science and Engineering (JCR 2012, Impact Factor: 0.385)	Vol. 39, 2014, pp. 4737-4751
8	Intelligent Modelling and Control of a Conveyor-Belt Grain Dryer Using a Simplified Type-2 Neuro-Fuzzy Controller	Drying Technology (JCR 2013, Impact Factor: 1.742)	Vol. 33, No. 10, 2015, pp. 1210-1222
9	Wavelet Neural Network-based NARMA-L2 Internal Model Control Utilizing Micro Artificial Immune Techniques to Control Nonlinear Systems	The Arabian Journal for Science and Engineering (JCR 2013, Impact Factor: 0.367)	Vol. 40, No. 9, 2015, pp. 2813-2828

Publication in International Journals classified under SCOPUS			
No.	**Title of paper**	**Publisher**	**Date**
1	A Simplified PID-like ANFIS Controller trained by Genetic Algorithm to Control	Australian Journal of Basic and Applied Sciences	Vol. 4, No. 12, 2010, pp. 6331-6345

	Nonlinear Systems		
2	Utilizing Global-best Harmony Search to Train a PID-like ANFIS Controller	Australian Journal of Basic and Applied Sciences	Vol. 4, No. 12, 2010, pp. 6319-6330
3	Radial Basis Function Neural Network Trained by Adaptive Chaotic Particle Swarm Optimization to Control Nonlinear Systems	Australian Journal of Basic and Applied Sciences	Vol. 7, No. 4, 2013, pp. 613-625
4	PID-like ANFIS Controller Trained by PSO Technique to Control Nonlinear MIMO Systems	Australian Journal of Basic and Applied Sciences	Vol. 7, No. 4, 2013, pp. 626-640
5	Self-Organized Behaviour in a Modified Multi-Agent Simulation Model Based on Physical Force Approach	Journal of Telecommunication, Electronic and Computer Engineering (JTEC)	Vol. 8, No. 11, 2016, pp. 57-62

Publication in Local and International Conferences

No.	Title of paper	Publisher	Date
1	Genetic Algorithms Based Fuzzy Neural Controller for Dynamic Systems	Proceedings of the Third International Conference in Computer Engineering, Communication, and Control and Systems	December 2002
2	A PID-Like ANFIS Controller Trained by PSO Technique to Control Nonlinear Systems	Proceedings of the Second International Conference on Control, Instrumentation and Mechatronic Engineering	June 2-3, 2009. pp. 414-419
3	A Genetically Trained Simplified ANFIS Controller to Control Nonlinear MIMO Systems	International Conference on Electrical Control and Computer Engineering	June 21-22, 2011. pp. 349-354
4	Fuzzy Control of Grain Drying Process	The 11th International Conference on Computer Modelling and Simulation	March 25-27, 2009. pp.9-13
5	Control of Nonlinear Systems Utilizing a Wavelet Neural Network Controller Optimized by Micro Artificial Immune Systems	The Second Engineering Conference of Control, Computers, and Mechatronics	February 25-27, 2014. pp. 113-119
6	Modelling of a Conveyor-belt Grain Dryer Utilizing a Sigmoid Network	10th Asian Control Conference	31st May – 3rd June, 2015. pp. 1-5
7	Agent Motivational and Repulsion Forces Optimization in Agent Basic Movement Model	10th Asian Control Conference	31st May – 3rd June, 2015.
8	Self-Organized Behaviour in a Modified Multi-Agent Simulation Model Based on Physical Force Approach	International Conference on Advanced Technology and Applied Sciences (ICaTAS2016)	September 6-7, 2016

Honors		
No.	**Granting Authority**	**Date**
1	President of the University of Technology	24 / 01 / 2006
2	President of the University of Technology	28 / 09 / 2006
3	Head of the Control and System Engineering Department	8 / 03 / 2012
4	Minister of Higher Education and Scientific Research	15 / 04 / 2012
5	President of the University of Technology	15 / 04 / 2012
6	University of Technology Vice President for Scientific Affairs	6 / 05 / 2012
7	Head of the Control and System Engineering Department	8 / 05 / 2012
8	Head of the Control and System Engineering Department	19 / 09 / 2013
9	Head of the Control and System Engineering Department	6 / 11 / 2013
10	Head of the Control and System Engineering Department	16 / 02 / 2014
11	Minister of Higher Education and Scientific Research	22 / 05 / 2013
12	President of the University of Technology	14 / 09 / 2015
13	President of the University of Technology	19 / 06 / 2017

Supervision of post graduate theses (up-to-date)				
No.	**Title**	**Master/ Doctorate**	**University**	**Date**
	Model Reference Adaptive Control based on Utilizing Artificial Immune Techniques to Control Nonlinear Systems	Master	University of Technology	2015-2016
	Internal Model Control based on Utilizing Self-Recurrent Wavelet Neural Networks Trained by a Simplified Artificial Immune Technique for Nonlinear Systems	Master	University of Technology	2016-2017
	PID-Like Modified Elman Network to Control Nonlinear Systems	Master	University of Technology	2017-2018