

# Curriculum Vitae



#### PERSONAL INFORMATION

### Name **MOHAMMED AWAD.**

Address

Arab American University-Jenin, Palestine. P.O. BOX 240.

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mohammed.awad@gmail.com

Nationality Date of Birth

Palestinian.

January, 21/1976.

Marital Status

#### Married

#### **Profile:**

- Academic Rank: Full Professor.
- Excellent Experience in Teaching: Graduate and Undergraduate
- Examiner and Supervisor for Many Master Thesis.
- Excellent Publication Record. (With more than 135 citations).
- Awarded Many Scholarships.
- Win Scientific Research Excellence Awards.
- Excellent Experience in Evaluation Programs of Bachelor Degrees for the Ministry of Higher Education.
- Excellent Experience in Managing the Academic Departments, Including Working on Creating, Renewing and Obtaining Accreditation.
- Excellent Experience in Managing Scientific Research: Funding Projects, Organizing Conference Attendance, Scholarship Programs, and Research Awards.
- Excellent Experience in University Committees and Councils.
- chairperson of Computer Systems Engineering department, and Computer Information Technology department.
- Former Dean of Scientific Research.
- Former Editor-In-Chief, Journal of the Arab American University.
- Former Chairman of the Preparatory Committee of Several Local Conferences.
- The Ability to Organize Local and International Conferences.

## **EXPERIENCE**

- Date: (From To):
- Name and Direction:
- Type of Sector:
- Charge:

#### Responsibilities

- Date: (From To):
- Name and Direction:
- Type of Sector:
- Charge:

### Responsibilities

- Date: (From To):
- Name and Direction:
- Type of Sector:
- Charge:

#### Responsibilities

#### 12/12/ 2016 -Till Now.

Arab American University-Jenin, Palestine. University.

### Full Professor.

- Teach graduate and undergraduate students and prepare their exams.
- Guide, direct and mentor research scholars in their research projects.
- Take part in all activities of the department and college.
- Grade papers and tests; prepare exercises, lessons and lab experiments for the students.
- Perform research and participate in conferences.
- Participate in the committees and councils of the university.
- Participate in evaluating and developing the programs and syllabuses.

### 08/12/2010 - 11/12/2016.

Arab American University-Jenin, Palestine. University.

#### Associate Professor.

- Teach graduate and undergraduate students and prepare their exams.
- Guide, direct and mentor research scholars in their research projects.
- Take part in all activities of the department and college.
- Grade papers and tests; prepare exercises, lessons and lab experiments for the students.
- Perform research and participate in conferences.
- Participate in the committees and councils of the university.
- Participate in evaluating and developing the programs and syllabuses.

#### 01/09/2014 - 31/08/2016.

Arab American University-Jenin, Palestine.

University.

### Dean of Scientific Research.

The responsibilities include in addition to the **Associate Professor** (*Teaching Load 6 Credit Hours*) responsibilities:

- Follow up the activities of the Deanship.
- Prepare for Scientific Research Council meeting.
- Implements the decisions of the Scientific Research Council.
- Oversees the preparation of the overall budget and follow up their Implementation.
- Planning, Managing, promotion and Organizing the Support of research activities that are carried out by the academic departments Through internal and external funding.
- Organizing the process of internal Funding for research projects.
- Organizing the central workshops that serve research needs of the colleges.
- Organizing appropriate financial support for publication of papers presented by faculty members in scientific indexed journals.
- Organize and manage the Award Engineer ZUHAIR HIJJAWI.

- Date: (From To):
- Name and Direction:
- Type of Sector:
- Charge:

### 01/09/2014 - 31/08/2016.

Arab American University-Jenin, Palestine.

#### University.

### Editor-in-Chief.

### Journal of the Arab American University.

#### Responsibilities

- Works with Editorial Board to develop strategies for the Journal.
- Serve as a liaison between the reviewers and publisher, and Editorial Board.
- Seeks advice from the Editorial Board on important issues.
- Rejecting writing that appears to be plagiarized, ghost-written, published elsewhere.
- Motivating and developing editorial staff.
- Ensuring the final draft is complete and there are no omissions.
- Defines the instructions to authors in conjunction with Editorial Board for the preparation of manuscripts.
- Convenes the Editorial Board meeting.

• Date: (From - To):

- Name and Direction:
- Type of Sector:
- Charge:

#### 01/10/2013 - 31/8/2014.

Arab American University-Jenin, Palestine. University.

#### Vice Dean of Scientific Research.

#### Responsibilities

The responsibilities include in addition to the <u>Associate Professor</u> (*Teaching Load 9 Credit Hours*) responsibilities:

- Working with the Dean to develop the Scientific Research Deanship.
- Follow up the activities of the Deanship.
- Prepare for Scientific Research Committee meeting.
- Implements the decisions of the Scientific Research Committee.
- Oversees the preparation of the overall budget and follow up their implementation.
- Organizing the Support of research activities that are carried out by the academic departments through internal and external funding.
- Organizing the process of internal Funding for research projects.
- Organizing the central workshops that serve research needs of the colleges.
- Organizing appropriate financial support for publication of papers presented by faculty members in scientific indexed journals.
- Organize and manage the Award Engineer ZUHAIR HIJJAWI.

#### • Date: (From - To):

- Name and Direction:
- Type of Sector:
- Charge:

### 1/7/2013 -1/9/2013 (Summer Course).

Arab American University-Jenin, Palestine. University.

### <u>Acting Dean of Graduate Studies & Scientific</u> Research.

#### Responsibilities

The responsibilities include in addition to the <u>Associate Professor</u> responsibilities:

- Planning, Managing, promotion, and support of research activities that are carried out by the academic departments through internal and external funding.
- Administration the Master programs of instruction leading to graduate credit and graduate degrees.
- Funded research projects, professional conference attendance, research scholarship programs, and research awards.
- Manage central workshops that serve research needs of the colleges.
- Planning and managing research and other scholarly activities through the scientific research Council or Committee.
- Providing appropriate financial support for publication of papers presented by faculty members in scientific indexed journals.
- Date: (From To):
- Name and Direction:
- Type of Sector:
- Charge:

#### 01/09/2012 -31/8/2013.

Arab American University- Jenin, Palestine. University.

#### Vice Chairperson of Scientific Research Committee.

#### Responsibilities

The responsibilities include in addition to the <u>Associate Professor</u> (*Teaching Load 9 Credit Hours*) responsibilities

- Preparation and organization of meetings of the Scientific Research Committee.
- Organizing the Support of research activities that are carried out by the academic departments through internal and external funding.
- Organizing the process of internal Funding for research projects.
- Organizing the central workshops that serve research needs of the colleges.
- Organizing appropriate financial support for publication of papers presented by faculty members in scientific indexed journals.
- Organize and manage the Award Engineer ZUHAIR HIJJAWI.
- Date: (From To):
- Name and Direction:
- Type of Sector:
- Charge:

#### 01/09/2010 - 15/9/2012.

Arab American University- Jenin, Palestine. University.

### Head of Computer Systems Engineering Department.

#### Responsibilities

The responsibilities include in addition to the <u>Associate Professor</u> (*Teaching Load 9 Credit Hours*) responsibilities.

Creating different committees, assigning responsibilities to these committees, assigning responsibilities to the individuals in the department, preparing the class schedule, appointing faculty members, preparing assessment forms, developing the curriculum, maintain the academy standards with each course, monitoring instructors performance (including lectures, assignments,...), instructors development, maintaining good relationships among the staff, the availability of the resources, and preparing the annual reports.

- Date: (From To):
- Name and Direction:
- Type of Sector:
- Charge:

### 01/02/2006 - 08/12/2010.

Arab American University-Jenin, Palestine.

University.

### <u>Assistant Professor.</u>

#### Responsibilities

- Develop and execute inventive instructional methods.
- Guide, direct and mentor research scholars in their research projects.
- Review, assess and evaluate the activities and progress of students.
- Grade papers and tests; prepare exercises, lessons and lab experiments for the students.
- Teach undergraduate students and prepare their exams.
- Do research and participate in conferences.
- Participate in the committees and councils of the university.
- Participate in evaluating and developing the programs and syllabuses.
- Date: (From To):
- Name and Direction:
- Type of Sector:
- Charge:

#### 01/10/2006 - 01/09/2010.

Arab American University- Jenin, Palestine.

University.

<u>Head of Computer Information Technology Department</u> Which had two Degrees CIT and MMT (MMT 2007).

### Responsibilities

The responsibilities include in addition to the <u>Assistant Professor</u>. responsibilities:

Creating different committees, assigning responsibilities to these committees, assigning responsibilities to the individuals in the department, preparing the class schedule, appointing faculty members, preparing assessment forms, developing the curriculum, maintain the academy standards with each course, monitoring instructors performance (including lectures, assignments,...), instructors development, maintaining good relationships among the staff, the availability of the resources, and preparing the annual reports. <u>Teaching Load 9 Credit Hours.</u>

Credit Hour

• Date: (From - To):

• Name and Direction:

• Type of Sector:

• Charge:

08/2005 - 01/2006.

Granada University.

Research Project.

Contract Researcher in the Research Group of Dept. of Computer Architecture and Computer Technology.

• Date: (From - To): Name and Direction:

• Type of Sector:

• Charge:

13/6/2010 - 17/7/2010.

Granada University.

Erasmus Mundus academic Staff Scholarship.

Invited Professor at the Granada University —Spain, in the Program of Erasmus Mundus Academic Staff Scholarship.

• Date: (From - To):

**Sept 2000 – Sept 2001** 

Working as Engineer in Factories and in Electrical Power Translation and Distributions with Japan NJOs for building Schools in Palestine.

## **EDUCATION**

• Date: July 2003 - July 2005

Name of the University:

Main Materials Treated:

University of Granada – Spain.

**Ph.D.** Thesis in the Dept. of Computer Architecture and Computer Technology. Inside the Ph.D. program: *Computer Engineering:* 

Perspectives and Applications.

(Scholarship From Spanish Government).

Certificate of Qualification Degree: **Doctor of Computer Engineering.** 

High degree of honor. (Sobresaliente Cum Laude).

• Ph.D. Thesis Title:

MODELING OF COMPLEX SYSTEMS USING HIERARCHIC STRUCTURES OF RADIAL BASIS FUNCTION NETWORKS.

DETAILS:

In the Ph.D. Thesis, we described a new technical approach focused on the search of new architectures to modeling complex systems of function approximation, without the increase of the number of input variables has to suppose an exponential increase of the complexity of the approximate system. The proposed Neural Network structure is formed by radial basis function neural networks with only one output for all and with the property of which every RBFNN can take charge of a set of variables of inputs and not of all. We designed new algorithms for the initialization of RBFNN parameters designed for the problem of function approximation. We have also provided a method, which automatically finds the most suitable topology of the proposed Neural Network structure and selects the most important inputs for it.

• Date: Oct 2002 – Jul 2003

Name of the University:

Main Materials Treated:

University of Granada - Spain.

**Master in Computer Engineering.** In the Dept. of Computer Architecture and Computer Technology. Inside the Ph.D. program: Computer Engineering: Perspectives and Applications.

(Scholarship From Spanish Government).

Degree:

High Degree with honor. (Sobresaliente).

DETAILS:

The design of Algorithms for the optimization of Neural Networks focused on autonomous control.

We used Traditional Algorithms to optimize Neural Networks, and the Optimization the Topology of Neural Networks. (it's a part of the Ph.D. Thesis.)

• Date: Oct 2001 – Jul 2002

Name of the University:

University of Granada - Spain.

Main Materials Treated:

<u>Courses</u> in the Dept. of Computer Architecture and Computer Technology, inside the Ph.D. program: Computer Engineering: Perspectives and Applications.

Degree:

High Degree of honor. (Sobresaliente). (Scholarship From Spanish Government).

DETAILS:

Computers and Biomedical Instrumentation.

Each course of 3 credit hours

- Advanced Tools for System Simulation.
- Advanced Languages and Tools for Hardware Design (VHDL).
- Microcontrollers of Low Consumption.
- Advanced Models for Time Series Prediction.
- Control Systems of Intelligent Building: (Demotic).
- Intelligent Systems Processing.

• Date: Oct 1995 – Jul 2000

- Name of the University:
- Main Materials Treated:
  - Degree:
- DETAILS:

Palestine Polytechnic University, Palestine.

**B.A. Eng.: Industrial Automation Engineering.** 

Very Good.

Industrial automation, computer-assisted manufacturing, and robotics have opened new fields in the planning, installation, and service of automated equipment and systems. Industrial automation can help make factories more efficient in the use of personnel, materials, and machines. They can also have responsibilities for workflow and analyze production. Some may be involved in the design, development, and testing of new manufacturing techniques and systems.

**Important Courses from B.A:** Programming Languages, Control systems, Power Electronics, Microprocessor, Microprocessor Lab, Interfacing and Data Comm. The principal of Sensors, Electrical Drive I, Electrical Drive I Lab, Electrical Drive II Electrical Drive II Lab, Signal and System Analysis, Electrical Protection System, Hydraulic and Pneumatic Systems, Hydraulic and Pneumatic Systems Lab, Automatic Control, Automatic Control Lab Principals of Robot Systems.

Graduation Project I and II (Building an Automation system SW and HW of Stone Saws that make the process of cutting stones more precise and more efficient).

**SKILLS:** 

- Computer (MATLAB (excellent experience), C++, VB, PHP, JavaScript, HTML, MySQL Server, VHDL, Assembly language, Prolog)
- Very good Knowledge of Learning Algorithms for NNs.
- Experience and very good knowledge of System for parallel processing in Neural Networks.
- Very Good knowledge in PLC, electrical drive, and control system.
- Assists the director of my Ph.D. in laboratories.

#### • Small Project:

- o Control of the center of gravity of car robot using VHDL.
- Intelligent control of parking using PLC.
- Control of the temperature room using a Fuzzy Logic controller.

#### MOTHER LANGUAGE

ARABIC.

#### OTHER LANGUAGES

SPANISH.

• Reading:

Excellent.

• Writing:

Very good.

• Oral Expression:

Excellent.

#### ENGLISH.

• Reading:

Excellent.

• Writing:

Excellent.

• Oral Expression:

Very Good.

#### **CONFERENCES & COURSES**

Date: Jun 2005

Intarnational Work Artifitial Neural Networks (IWANN) 2005, Springer-Verlag Berlin Heidelbergm, Barcelona.

 Date: 1/10/2005 – 30/12/2005 Administrator of Servers and Web Pages 350 Contact hours.

• Date: (07–08)/07/2008

Intel Higher Education Program (Technology Entrepreneurship) Theory to Practice Seminar.

■ Date: (9-11/3/2010)

The 3<sup>rd</sup> Palestinian International Conference on Computer and Information Technology. Hebron-Palestine.

■ Date: (26/1/2012)

External Examiner for Master Thesis at Palestine Polytechnic University.

■ Date: (24-28/8/2014)

Training Workshop "Technology Transfer And Intellectual Property Commercialisation Training For Universities"

■ Date: (17/11/2014)

Organize the Conference "Practical Education System and its Impact on Education in Palestine" Partnership with Ministry of Education.

■ Date: (20/04/2015)

Organize the Conference "The First Applied Bio-Medical Science" Partnership with Ministry of Health.

■ Date: (12/05/2014)

■ Date: (14/05/2014)

■ Date: (30/10/2014)

■ Date: (8-12/6/2015)

■ Date: (26-28/3/2015)

■ Date: (1/12/2015)

■ Date: (1/2/2015)

■ Date: (2009-2016)

Organize the Conference "Mechanisms to Strengthen Scientific Research in the Palestinian universities".

Organize the Conference "What is the Legal System of Brand Names in Palestine".

Technological Ibdaa Conference. (Technology Transfer).

INTERNATIONAL CONFERENCE ON APPLIED ANALYSIS AND MATHEMATICAL MODELLING (ICAAMM2015) jointly organized by Yıldız Technical University, University Putra Malaysia and Malaysian Mathematical Sciences Soc. The conference will be held on 8-12 JUNE 2015 in ISTANBUL, TURKEY.

General Conference of the Association of Arab Universities at its Forty-eighth session (Lebanon session), Saint Joseph University.

Training Course on the basics of Scientific Research for Schools Teachers in Ministry of Education.

#### **Supervision of Several Master Thesis:**

- 1. Performance Evaluation and Classification of Solar Cells Efficiency According To Area Using Neural Networks. 2015/03/23.
- 2. Prediction of Electricity Consumption Using Artificial Neural Networks and Optimization Algorithms. 2015/03/23.
- 3. Text Mining Using Radial Basis Function Neural Networks and Optimization Algorithms. 2015/11/01.
- 4. Academic Advising and Supporting University Students Using Fuzzy Expert Systems. 1/11/2015.
- 5. Intelligent Solution for Newly Cyberspace Attacks 1/10/2016.
- 6. Forecasting Weather Conditions Using Artificial Neural Networks 1/10/2016
- 7. A Markovian Model for an IoT Network 1/10/2016.
- 8. Prediction of Water Demand in North of Palestine Using Artificial Neural Networks

#### **External Examiner for Master Thesis:**

- 1) Efficient Feature Selection using Particle Swarm Optimizations: A Hybrid Filter Approach. 6/2016
- 2) Optimization of High-Dimensional Data Visualization using Parallel Genetic Algorithm. 5/2016
- 3) E-MOGA: A General Purpose Platform for Multi-Objective Genetic Algorithm running on CUDA. 1/2012
- 4) A Novel Visual Basic Software for Projection Operator Calculations in Chemistry. 10/2009
- 5) A New Visual Basis Software Built- up for solving out Reduction Formula in Chemical Applications of Group Theory. 10/2009
- 6) Protein Classification Optimization based on Encoding Descriptors 1/2017

COMMITTEES.	<b>COMN</b>	<b>IITTEES</b>	:
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■ Date: (8-12/6/2015) Had Won The Palestinian Islamic Bank Award For The Excellence In Scientific Research. (The Best Scientific Paper In The

**Palestinian Universities )** 

Date: (8-12/6/2015) Had Won the Best Poster Award at the International Conference "INTERNATIONAL CONFERENCE ON APPLIED ANALYSIS

AND MATHEMATICAL MODELLING (ICAAMM2015)", Yıldız

Technical University of Istanbul-Turkey.

Date: 9/2014 – 09/2016 Member of Scientific Research Council in Palestinian Universities (Held Every Three Months to Follow up the Development of

Scientific Research on the National Level).

Date: 2012 –2016 Organize, Manage, and Supervised the Zuhair Hijjawi Award for Graduation Projects of Bachelors Students in Palestinian

Universities (4 years).

Date: 2014 –2016

Active Participation to get External Funding for Several Research

Projects (Palestinian Council of Scientific Research, FAO, Union of

Arab Universities, International Energy Agency).

Date: (31/7-2/8/2016)

Member of the Preparatory Committee of the "Fifth Palestinian"

Conference on Modern Trends in Mathematics and Physics".

Date: (21/3/2016) Member of the Preparatory Committee "Fourth Conference on

Biotechnology Research and its Applications in Palestine".

Date: 2010 –2016 Member of International Association of Engineers (IAENG).

Date: (01/09/2013)

Member of the Committee Preparing the Bachelor Program of

Networking and Information Security. (Submitted to Getting Accreditation).

Date: 09/2014-9/2016 Chairman of the Ethics Committee of Scientific Research.

Date: 9/2014 – 09/2016 Member of the Disciplinary Primary Council.

■ Date: 9/2011 – 09/2012 **Member of AAUJ Research Council.** 

■ Date: 9/2010 – 09/2015 **Member of AAUJ Disciplinary Council.** 

■ Date: 9/2011 – 09/2013 | Member of Engineering and Information Technology Faculty

Council.

■ Date: 9/2013 – 09/2014 | Member of the Engineering and Information Technology Faculty

Council.

Date: 07/2006 – 09/2012
 Member of Arab American University Council.

■ Date: 09/2009-09/2010 Member of AAUJ Research Committee.

■ Date: 5/2009 –9/2009

Member of the Zuhair Hejawy Prize Committee.

■ Date: 10/2006 – 10/2007

Member of Group of Built the Strategic Plan for Arab American University.

■ Date: 10/2006 – 10/2008

Built the Plan for Computer System Engineering Program for AAUJ (which obtained accreditation in 2009).

■ Date: 9/2010 – 9/2012

Built the Plan of Master Computer Science for AAUJ. (which obtained accreditation in 2013).

■ Date: 3/2006 – 7/2006

Member of Group of Built the Plan of Telecommunication Engineering Program for AAUJ.

(which obtained accreditation in 2007).

■ Date: 9/2007 – 8/2008

Supervisor of Labs Supervisors on the E& IT Faculty in AAUJ.

# INTERESTS RESEARCH FIELD:

- Artificial Intelligence.
- Radial Basis Function Neural Networks.
- Complex Systems of Function Approximation.
- Hierarchic Structure for Function Approximation.
- Clustering Algorithms.
- Input Variable Selection.
- Fuzzy and Neuro-Fuzzy System.
- Genetic Algorithms.
- Time Series Prediction.
- Particle Swarm Optimization.

#### **Teaching Courses:**

- Advanced Artificial Intelligence (*Master Course*)
- Neural Networks (Master Course).
- Artificial Intelligence.
- Algorithms and Programming Techniques.
- Algorithms Analysis and Design.
- Data Structures.
- VHDL Programming.
- Theory of Computation.
- Advanced Digital System Design.
- Digital Logic Design.
- Intelligent Systems.
- Web Development.
- Digital Logic Design Lab.
- Introduction to Computers.
- Network Lab.
- Master Thesis Supervisor (Master Course).
- Seminar Supervisor.
- Senior Projects Supervisor

#### **PUBLICATIONS:**

Ihab Hamdan, Mohammed Awad\*, Walid Sabbah' "Short-Term Forecasting of Weather 1. Conditions in Palestine Using Artificial Neural Networks", Journal of Theoretical and Applied Information Technology, Accepted **Scopus Journals** Alaeddin Alabdallah, **Mohammed Awad**\*, "Using weighted Support Vector Machine to 2. address the imbalanced classes problem of Intrusion Detection System", KSII Transactions on Internet and Information Systems, Accepted. (ISI Journals). Mohammed Awad\*, Ibrahim Qasrawi "Enhanced RBF Neural Network Model for Time 3. Series Prediction of Solar Cells Panel Depending on Climate Conditions (Temperature and Irradiance)". Neural Computing & Applications Springer Journals. **Published:** IF 1.57. DOI: 10.1007/s00521-016-2779-5 (ISI Journals). Shorouq Salahat, Mohammad Awad\*, "Short-Term Forecasting of Electricity 4. Consumption in Palestine Using Artificial Neural Networks". International Journal of Artificial Intelligence & Applications (IJAIA), Accepted January 2017. Published March 2017, Volume 8, Number 2 doi:10.5121/jiaja Mohammed Awad\*, Monir Foqaha," Email Spam Classification Using Hybrid Approach 5. of RBF Neural Network and Particle Swarm Optimization. International Journal of Network Security & Its Applications (IJNSA), Vol.8, No.4, July 2016 (ERA Journals). DOI: 10.5121/iinsa.2016.8402 Monir Foqaha Mohammed Awad\*, "Hybrid Approach to Optimize the Centers of Radial 6. Basis Function Neural Network Using Particle Swarm Optimization". Journal of Computers (JCP), Volume 12 Number 5 2017. (ERA Journals). Mohammed Awad "Enhanced Hybrid Method of Divide-and-Conquer and RBF Neural 7. Networks for Function Approximation of Complex Problems". Turkish Journal Of Electrical Engineering & Computer Sciences, ACCEPTED. March 2016. IF: 0.407. DOI:10.3906/elk-1510-90. (ISI Journals). Mohammed Awad, Abdelmunem Abuhasan, "A Smart Clustering Based Approach to 8. Dynamic Bandwidth Allocation in Wireless Networks", The International Journal of Computer Networks & Communications (IJCNC), Vol.8, No.1, PP. 73-86, 2016. DOI:10.5121/ijcnc.2016.8106 (ERA Journals). Mohammed Awad\*, Aseel Kmail, "Towards Enhancing Stock Market Watching Based 9. On Neural Network Predictions". International Journal of Information Technology and Business Management (JITBM). Vol.45 No.1. PP.1-6, 2016. Mohammed Awad, "Forecasting of Chaotic Time Series Using RBF Neural Networks Optimized By Genetic Algorithms", The International Arab Journal of Information Technology. Volume \*(15), No. (1), January 2018. IF: 0.582. (ISI Journals). Ibrahim Qasrawi, Mohammed Awad\*, "Prediction of the Power Output of Solar Cells Using Neural Networks: Solar Cells Energy Sector in Palestine". CSC Press, Computer Science Journals: International Journal of Computer Science and Security, Volume (9): Issue (6): November 2015. PP. 280-292. (ERA Journals).

- **Mohammed Awad\*,** Malek Imam, "Enhanced Method for Avoiding Worst-Case Complexity in Quicksort Algorithm". *INFORMATION International Information Institute* (*Tokyo*), Vol.18, No. 6(A), PP. 2209-2218. June **2015. IF (0.358), (ISI Journals).**
- **Mohammed Awad,** "Using Genetic Algorithms to Optimize Wavelet Neural Networks Parameters for Function Approximation" *International Journal of Computer Science Issues (IJCSI)*. Volume (11), Issue (1), PP. 256-267, **2014**. **JIF (0.45)**.
- H. Pomares, I. Rojas, M. Awad and O. Valenzuela, "An enhanced clustering function approximation technique for a radial basis function neural network," *Mathematical and Computer Modeling, ELSEVIER*, Vol.55, No.3-4, pp.286302, 2012. IF: 2.020 (ISI Journals).
- **Mohammed Awad** "Chaotic Time series Prediction using Wavelet Neural Network" Journal of Artificial Intelligence: Theory and Application. *Journal of Artificial Intelligence: Theory and Application*. VOLUME (1/2010) Issue (No 3). PP. 73-80. November 2010.
- **Mohammed Awad** "Optimization of Radial Basis Function Neural Networks Parameters using Genetic Algorithms: Applied on Function Approximation. *International Journal of Computer Science and Security (IJCSS)*, Volume (4): Issue (3). Pp.295-307. August 2010. (ERA Journals).
- 17. Mohammed Awad, "Function Approximation Using Genetic Algorithms for Evaluation of Centers and Radii of RBFNNs" The 3<sup>rd</sup> Palestinian International Conference on Computer and Information Technology. Hebron- Palestine. 3-2010.
- 18. Mohammed Awad "Approximating I/O data using Wavelet Neural Networks: Control the Position of Mother Wavelet" *The International Arab Journal of Information Technology*. Accepted in December 2009. Will be published Volume 9, No. 1, January 2012. IF: 0. 0.39. (ISI Journals).
- **Mohammed Awad** "Input Variable Selection using Parallel Processing of RBF Neural Networks" *The International Arab Journal of Information Technology*. published in Volume 7, No 1. pp.6-13. January 2010. **IF: 0. 0.065.** (**ISI Journals**).

- **20. M. Awad,** H. Pomares, I. Rojas, O. Salameh and M. Hamdon. "Prediction of Time series using RBF neural networks: a new Approach of Clustering" *The International Arab Journal of Information Technology*. Volume 6. No. 2. pp.138-144. April 2009. Volume 6, 2009, April 2009, No. 2. **IF: 0. 0.065. (ISI Journals).**
- 21. M. Awad, H. Pomares, I.Rojas, Member, IEEE "Enhanced Clustering Technique in RBF Neural Network for Function Approximation" INFOS2007, Fifth International Conference 24-26 March.2007, Cairo University Post Office, Giza, Egypt.
- **22.** Herrera, L.J., Pomares, H., Rojas, I., Guillén, A., González, J., **Awad, M.** and Herrera, A., "Multigrid-based fuzzy systems for time series prediction: CATS competition," Neurocomputing, vol. 70, issue 13-15, pp. 2410-2425, 2007. **IF: 2.005** (**ISI Journals**).
- 23. M. Awad, H. Pomares, I. Rojas, L. J. Herrera, A. Guillen, O. Valenzuela. "Hierarchical Structure for function approximation using Radial Basis Function" 8th WSEAS International Conference on APPLIED MATHEMATICS. WSEAS Conference, Puerto De La Cruz, Tenerife, Canary Islands, Spain. PP 502-75 December 16-18, 2005. ACM Digital Library.

- **24.** L.J. Herrera, H. Pomares, I. Rojas, A. Guillén, **M. Awad**, J. González. "interpretable rule extraction and function approximation from numerical input/output data using the modified fuzzy TSK model, TaSe model". Proceedings of SPIE The International Society for Optical Engineering 6104. (Septiembre de 2005) 402-411. **Springer- Proceedings.**
- 25. Luis Javier Herrera, Héctor Pomares, Ignacio Rojas, Alberto Guillén, Mohammed Awad, Olga Valenzuela: "Analysis of the TaSe-II TSK-Type Fuzzy System for Function Approximation". ECSQARU 2005: 613-624. Springer- Proceedings.
- **26. M. Awad**, H. Pomares, I. Rojas, L.J. Herrera, A. Prieto: "Input Variable Selection in Hierarchical RBF Networks". Springer Berlin (Lecture Notes in Computer Science). 8<sup>th</sup> International Work-Conference on Artificial Neural Networks (IWANN) 2005. ISBN: 0302-9743, Vol. 3512, pp. 280-288. 2005. Proceedings published in **Springer-Verlag Proceedings.**
- **27. M. Awad**, H. Pomares, F. Rojas, L.J. Herrera, J. González, A. Guillén. "Approximating I/O data using Radial Basis Functions: A new clustering-based approach". 8<sup>th</sup> International Work-Conference on Artificial Neural Networks (IWANN) 2005, LNCS. 3512. pp. 289 296, 2005. Proceedings published in **Springer-Verlag Proceedings.**
- 28. Herrera, L.J., Pomares, H., Rojas, I., Valenzuela, O., Awad, M., "MultiGrid- Based Fuzzy Systems for Function Approximation". Lecture Notes In Computer Science Vol. 2972, ISBN 3-540-21459-3, pp.252-261, April 2004. R. Monroy et al. (Eds.): MICAI 2004, LNAI 2972, pp. 252–261, 2004. Springer-Verlag Proceedings Berlín Heidelberg 2004.
- **29.** Luis Javier Herrera, Héctor Pomares, Ignacio Rojas, Alberto Guillén, Jesús González, and **Mohammed Awad**, "Clustering-Based TSK Neuro-Fuzzy Model for Function Approximation with Interpretable Sub-models", Lecture Notes in Computer Science, IWANN'2005, pp. 399-406. Proceedings published in **Springer-Verlag Proceedings.**
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