Curriculum Vitae

Nasir Ahmad filfil Alawad

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PERSONAL SUMMARY:

Name: Nasir Ahmad Al_awad
Date of Birth: 1-7-1957
Place of work: Faculty of Engineering/ Al-Mustansiriyah
Language: Arabic/English
Scientific Title: Prof. Dr.

ACADEMIC HONORS AND AWARDS:

I received around 60 letters of appreciation and acknowledgment certificates. These were issued from many administrative and scientific entities, such as the Minister of Higher Education and Scientific Research, the President of the Mustansiriyah University, and the Dean of the College of Engineering at Mustansiriyah University.

ACADEMIC /TEACHING EXPERIENCE:

1- Teaching many subjects like, Control theory, Computer control, Measurements & Instrumentation, Logic design
2- Guided the students of undergraduate program for their final year projects(more than 60 projects) on the following topics:-

- Model Reduction Techniques
- Stability and control theory
- Computer control applications
- Identification Techniques
- Computer Aided Design of control system using different approaches, and making use also some of the optimization techniques.
- Digital control of different processes using different control actions and approaches.

3- Supervising of undergraduate students in the following laboratories:-
Control Lab., Process control Lab., Components Lab., Design Lab., Logic & programming Lab.

COURSES TAUGHT:

Undergraduate	Graduate
Computer control Control Lab. Logic and programming Measurement and devices	Advanced control 2

PROFESSIONAL AFFILIATIONS:

- Member, Central Graduate System Committee, 2014 – Now
- Member in about 5 Postgraduate Examination Committees (M.Sc.)
- Have been a member and a chairman of more than 50 committees during the last five years
- Chairman, Computer Engineering Department, Faculty of Engineering/ Al-Mustansiriyah University , 2014 – 2019

M.Sc. Supervision:

Currently (2019-2020), three M.Sc. students

PUPLICATIONS

(1)- N.A.Al-awad, S.A.Al-beramina," Design and construction of gravitationally controlled solar concentrator", published in first scientific conference of university of technology 9-4,April 1984,Baghdad,Iraq.
(2)- N.A.Al-awad, A.K.Hassan," Prony based identification techniques", Electronics Telecommunication, vol. 70, February 1990,INDIA.
(3)- V.Krishnamurthi, W.K.Said, N.A.Al-awad,"Phase margin of linear time invariant systems from Routh array", IEE-control theory and applications, vol.138, No.4, July,1991,U.K.
(4) N.A.Al-awad, Kaymaz.I.A, B.M.Al-hadithi," Computer aided comparative study of model reduction techniques", published in first scientific conference of university of Al-mansoor collage 23-25,November 1992,Baghdad,Iraq.
(5)- N.A.Al-awad," Design and construction of self-tracking system of solar collector",Internationl Renewable Energy Conference, June 22-26, 1992,AMMAN, JORDAN.
(6)- N.A.Al-awad," Development of low-cost tracking mechanism for solar energy heating systems",CATAEE-97, 1-2 July,1997,JORDAN.
(7)- N.A.Al-awad," Digital controller design by generlized leaset-square method", Eng. and Technology journal,2000,No.4 ,Vol.19 , Baghdad-IRAQ.
(8)- N.A.Al-awad,Kaymaz.I.A, R.A.Salman" Adaptive control with a multi-input pole-assigment for the distillation column", Eng. And Development journal,Baghdad-IRAQ,part.1,vol.14,2010.
(9)- N.A.Al-awad," Model Reduction Of Continuous Systems By Modified Routh Array And Pade Approximation Technique", Eng. And Development journal,Baghdad-IRAQ,part.2,vol.14,2010.
(10)-Ekhlas H.Karam, Nasir A.Al-awad, Qussy S.Tawfeeq,"Smith predictor with simple control scheme for higher order systems", Eng. and Technology journal, ,2011, Baghdad-IRAQ. Vol.29,No.3
(11)-Nasir A.Filfil, Deia Halboot Mohussen,Dr. Khamis A.Zidan,"Microcontroller-Based Sun Path Tracking System", Eng. and Technology journal,vol.29,No.7 ,2011, Baghdad-IRAQ.
(12)- Nasir A.Filfil," Fuzzy Proportional-Derivative Sliding Mode Control with Minimal Rules For Disk Read System" Eng. And Development journal Vol. 21, No.03, May 2017.

(13)-Nasir.A.Al-awad," Digital controllers design for (AVR) using model order reduction methods", I.J.E.C.C.E,vo8,No5,2018.
(14) Nasir Ahmed Al-awad, Ghusoon Idan Arb. ANALYSIS OF SOLAR RADIATION Data IN CIRCULAR MODEL BASED ON NATURAL NEIGHBOUR INVERSE DISTANCE WEIGHTED. Journal of Engineering and Sustainable Development Vol. 22, No.02 (Part-5), March 2018.
(15)- Nasir Ahmed Al-awad, Ayam Mohsen Abbass, Majid Eddan Dubkh," PID Controller Design for a Magnetic Levitation System using an Intelligent Optimization Algorithm",IJSSST,vo19,No.1,Feb.2018.
(16) Nasir A. Al-Awad, Muaayed F.Al-Rawi," On the Performance of COFDM System", International Journal of Open Information Technologies ISSN: 2307-8162 vol. 6, no.7, 2018.
(17) Mahmood Z. Abdullah, Nasir A. Al-awad and Fatima W. Hussein," Performance Comparison and Evaluation of Different Software Defined Networks Controllers", Int. J. Com. Net. Tech. 6, No. 2 (May-2018).
(18) Mahmood Z. Abdullah , Nasir A. Al-awad , Fatima W. Hussein," Performance Evaluation and Comparison of Software Defined Networks Controllers", International Journal of Scientific Engineering and Science, Volume 2, Issue 11, pp. 45-50, 2018.
(19) Izz K. Abboud, Muaayed F. Al-Rawi, Nasir A. Al-Awad," Performance Analysis of Interleave Division Multiple Access System", International Journal of Open Information Technologies ISSN: 2307-8162 vol. 7, no.6, 2019.
(20) Nasir Ahmed Al-awad," Genetic Algorithm Control of Model Reduction Passive Quarter Car Suspension System", I.J. Modern Education and Computer Science,Feb. 2019, 2, 9-16.
(21) Nasir Ahmed Al-Awad," Optimal Control of Quadruple Tank System Using Genetic Algorithm", Int. J. Com. Dig. Sys. 9, No.1 (Jan-2019).
(22) Mahmood Z. Abdullah, Nasir A. Al-awad, Fatima W. Hussein," Implementation of Entropy-based Distributed Denial of Service Attack Detection Method in Multiple POX Controllers", Review of Computer Engineering Studies Vol. 6, No. 2, June, 2019, pp. 29-38.
(23) Ekhlas H. Karam, Nasir A. Al-Awad, Noor S. Abdul-Jaleel," Design nonlinear model reference with fuzzy controller for nonlinear SISO second order systems", International Journal of Electrical and Computer Engineering (IJECE),v9.n4,Aug.2019.
(24)Nasir Ahmad Alawad, Nora Ghani Rahman," Particle Swarm Optimization with Pade Approximation Based-Model Reduction of Automatic Voltage Regulator", International Journal of Latest Engineering Science (IJLES), Vo2, Issue5 September to October 2019.
(25) Nasir Ahmad Alawad, Nora Ghani Rahman," Design of (FPID) controller for Automatic Voltage Regulator using Differential Evolution Algorithm", I.J. Modern Education and Computer Science, 2019, 12, 21-28.
(26) Nasir A. Al-Awad, Nora G. Rahman ," FPID controller design based different optimization Techniques for model order reduction of AVR", International Journal of Open Information Technologies ,vol. 8, no.3, 2020.
(27) Nasir A. Al-Awad, Nora G. Rahman," Tuning FPID Controller for an AVR System Using Invasive Weed Optimization Algorithm", Jordan Journal of Electrical Engineering, Volume 6, Number 2, 2020.
(28) Nasir Ahmed Alawad, Afaf Jebar," Decoupling and Model Reduction for the Binary Distillation Column Linear System", International Journal of Scientific Engineering and Science, Volume 4, Issue 3, pp. 25-31, 2020.
(29) Nasir Ahmed Alawad, Afaf Jebar," FUZZY CONTROLLER OF MODEL REDUCTION DISTILLATION COLUMN WITH MINIMAL RULES", Applied Computer Science,vol.16,no.2,2020.
(30) Nasir Ahmed Alawad, Afaf Jebar," Comparison Performance of PI and FPI Controllers for Model Reduction of Binary Distillation Column Plant", Brilliant Engineering 1 (2021) 25-29.
(31) Nasir A. AL-AWAD, Muaayed F. AL-RAWI, Izz K. ABBOUD," PERFORMANCE ANALYSIS AND EVALUATION OF MASSIVE MIMO SYSTEM" Applied Computer Science, vol. 16, no. 2, pp. 112–119.2020.
(32) Nasir Ahmed Alawad," MODEL REFERENCE ADAPTIVE CONTROL-BASED GENETIC ALGORITHM DESIGN FOR HEADING SHIP MOTION," Acta Polytechnica 60(3):197–205, 2020.

(33) Nasir Ahmed Al-Awad," Steam turbine controllers design based on soft-computing techniques", International Journal of Robotics and Automation (IJRA)Vol.9, No.4, December 2020, pp. 281-291.
(34) Nasir Ahmed Al-Awad," Optimal Controller Design for Reduced-Order Model of Rotational Mechanical System" Mathematical Modelling of Engineering Problems,Vol. 7, No. 3, September, 2020, pp. 395-402.
(35) Nasir Ahmed Alawad, Nora G. Rahman," Frequency Design Approach for FPID controller of Model Reduction AVR" Brilliant Engineering 2 (2021) 31-37.
(36) Nasir Ahmed Alawad, Afaf Jebar," Optimal Control of Model Reduction Binary Distillation Column", I.J. Modern Education and Computer Science, 2021, 1, 59-68.
(37) Nasir A. AL-AWAD, Muaayed F. AL-RAWI, Izz K. ABBOUD," GENETIC ALGORITHM-PID CONTROLLER FOR MODEL ORDER REDUCTION PANTOGRAPHCATENARY SYSTEM". *Applied Computer Science, ,2021,vol. 17, no. 2, pp. 28–39.*
(38) Alawad, N.A., Humaidi, A.J., Al-Araji, A.S. (2022). Improved active disturbance rejection control for the knee joint motion model. Mathematical Modelling of Engineering Problems, Vol. 9, No. 2, pp. 477-483. https://doi.org/10.18280/mmep.090225.
(39) Nasir A. Alawad, Amjad J. Humaidi, Abdulkareem Sh. Mahdi Al-Obaidi, Ahmed Sabah Alaraj.(2022). Active Disturbance Rejection Control of Wearable LowerLimb System Based on Reduced ESO. Indonesian Journal of Science & Technology, 7(2),203-218.
(40) Nasir A. Alawad, Amjad J. Humaidi, Ahmed Sabah Alaraji.2022. Clinical trajectory control for lower knee rehabilitation using ADRC method. Journal of Applied Research and Technology, 20(2),pp.576-583.
(41) Nasir Ahmed Alawad , Amjad J. Humaidi , Ahmed Sabah Alaraji . Observer Sliding Mode Control Design for lower Exoskeleton system: Rehabilitation Case Journal of Robotics and Control (JRC),Volume 3, Issue 4, July 2022.
(42) Nasir Ahmed Alawad , Amjad J. Humaidi , Ahmed Sabah Alaraji. Fractional proportional derivative-based active disturbance rejection control of knee exoskeleton device for rehabilitation care, Indonesian Journal of Electrical Engineering and Computer Science,Vol. 28, No. 3, December 2022, pp. 1405~1413.
(43) Nasir Ahmed Alawad , Amjad J. Humaidi , Ahmed Sabah Alaraji. Modified Tracking Differentiator for Enhancing the Performance of Exoskeleton Knee System Based on Active Disturbance Rejection Control. Iraqi Journal of Computers, Communications, Control & Systems Engineering (IJCCCE), Vol. 23, No. 1, March 2023.
(44) Nasir Ahmed Alawad , Amjad J. Humaidi , Ahmed Sabah Alaraji. Sliding Mode-Based Active Disturbance Rejection Control of Assistive Exoskeleton Device for Rehabilitation of Disabled Lower Limbs. An Acad Bras Cienc (2023) 95(2):pp.1-17.
(45) Nasir Ahmed Alawad , Amjad J. Humaidi , Ahmed Sabah Alaraji. FRACTIONAL MULTI-LOOP ACTIVE DISTURBANCE REJECTION CONTROL FOR A LOWER KNEE EXOSKELETON SYSTEM. Acta Polytechnica 63(3):158–170, 2023.
(46) Nasir Ahmed Alawad , Amjad J. Humaidi , Ahmed Sabah Alaraji. A novel approach of multi-loop control based ADRC for improving lower knee position exoskeleton system. International Review of Applied Sciences and Engineering,14 (2023) 3, 316–324.
(47) Nasir Ahmed Alawad , Amjad J. Humaidi , Ahmed Sabah Alaraji. ACTIVE DISTURBANCE REJECTION CONTROL WITH DECOUPLING CASE FOR A LOWER LIMB EXOSKELETON OF SWING LEG. ICIC Express Letters, Volume 17, Number 11, November 2023.
(48) Nasir Ahmed Alawad , Amjad J. Humaidi , Ahmed Sabah Alaraji. Design of Active Disturbance Rejection Control for Rehabilitation-Assistant Device of Lower Limbs under Cross Coupling Effect. Proc IMechE Part C:J Mechanical Engineering Science,1–11,2024.
(49) Nasir Ahmed Alawad , Amjad J. Humaidi , Ahmed Sabah Alaraji. Error-based ADRC Approach of lower Knee Exoskeleton System for Rehabilitation. International Journal of Automation and Control, https://doi.org/10.1504/ijaac.2025.10061844.
(50) Mohammed M. Msallam, Nasir Alawad, Ammar K. Al Mhdawi, Ayman Al-Khazraji, Suha S. Husain, Amjad J. Huamidi. ANN-Based Ship Maneuvering Motion Control. IET Conference Proceedings 2024(37):650-655.

ROFFESSIONAL DEVELOPMENT

(1)- Training course on English language for five months organized by Leeds university in U.K,1990.

(2)- Training course on computer aided design for control system for three months organized by Bradford university in U.K.,1990.

Conferences:

Reviewer and Session Chair, Conference of Sustainable Energy, College of Engineering, Mustansiriyah University, 2017and 2018.

Workshops:

- Lecturer and Session Chair in over 12 symposiums across the last five years.
- Lecturer at 5 workshops during the current year and the last year.

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Google Scholar:-

https://scholar.google.com/citations?user=rPIKOpEAAAAJ&hl=ar

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