# Prof. Kasim Mousa Alwan AL-AUBIDY

PhD, Computer Control Engineering, University of Liverpool, UK, 1990

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# SPECIALIZATION:

- **Major:** Computer Control Engineering.
- Minor:- Design of Real-Time Computer Systems.
  - Intelligent Systems and Softcomputing Applications in Real-Time Systems.
  - Robotics and Automation.

## **QUALIFICATIONS:**

- Ph.D. (Computer Control Eng.), 1990, University of Liverpool, ENGLAND.
- M.Sc. (Computer Control Eng.), 1982 University of Technology, IRAQ.
- **B.Sc. (Control and Systems Eng.), 1979,** Control & Systems Eng. Department, University of Technology, IRAQ.

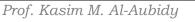
# **PROFESSIONAL EXPERIENCE:**

#### **2020-up-to-date:** Professor, Philadelphia University, Jordan:

- The Dean, Information Technology Faculty, (2020- up-to-date).
- Dean of Quality Assurance, (2020- up-to-date).
- Director of Engineering Office, Philadelphia University, (2016-up-to-date).
- Editor-in-chief of three international journals, and member of editorial boards for several journals as listed below.
- Member of steering committee of the IEEE international Multi-conference on Signals, Systems and Devices (IEEE-SSD), the general chair of the IEEE-SSD2020.

### 2007-2020: Professor, Philadelphia University, Jordan:

- Dean, Academic Research and Graduate Studies, (2019-2020)
- The Dean, Faculty of Engineering and Technology, (2007- 2019).
  Director of Engineering Office, Philadelphia University, (2016-up-to-date).
  Member of Executive Committee, Industrial Research and Development Fund, (2017-2019).
- Vice Dean, Faculty of Engineering, (2005-2007)
- Chairman of Computer Eng. Dept., Vice Dean, (1998-2005).
- Editor-in-chief for the journal "Review of Computer Engineering Studies (RCES)", International Information & Engineering Technology Association, Canada, http://www.iieta.org/Journals/RCES/EDITORS
- Chief Editor of Asian Journal of Information Technology (AJIT), http://www.medwelljournals.com/eboard.php?jid=1682-3915.
- Chief Editor of International Journal of Real-Time Systems (IJRTS), http://www.serialspublications.com/journals1.asp?jid=370&dtype=2&jtype=1
- Chief Editor of International Journal of Soft Computing (IJSC), from 2005 to 2008, http://www.medwelljournals.com/eboard.php?jid=1816-9503



- Member of editorial board of International Journal of Smart Computing and Information Technology (IJSCIT), Italy.
  - http://bohrpub.com/journals/IJSCIT.html#editorial
- Member of editorial board of Inter. Journal of Automation and Control Engineering (IJACE) http://www.seipub.org/ijace/PageInfo.aspx?PARAMS=VGl0bGVeRWRpdG9yaWFsIEJvYXJkXkZpbGVOY W11XkVkaXRvcmlhbEJvYXJkLmh0bQ\_0\_0
- Member of editorial advisory board of Inter. Journal of Informatics Technologies. (http://www.ijit.info/editorial.html)
- Member of editorial board of Inter. Journal of Reasoning-Based Intelligent Systems, (http://www.inderscience.com/browse/index.php?journalID=267)
- Member of editorial board of International Journal of Mechatronics and Automotive Research (IJMAR), (https://scidoc.org/editorial\_board.php?id=50)
- Member of editorial board of Information Technology Journal. (from 2008-2012) (http://ansijournals.com/3/eb.php?id=1&theme=3&jid=itj)
- Member of editorial board of Journal of Applied Sciences, (from 2008-2012) (http://ansijournals.com/3/eb.php?id=1&theme=3&jid=jas)
- Member of editorial board of i-manger's Journal on Embedded Systems, India, (http://www.imanagerpublications.com/ManagementEditorial.aspx)
- Member of editorial board of i-manger's Journal on Future Engineering & Technology, India, (http://www.imanagerpublications.com/ManagementEditorial.aspx)
- Member of editorial board of i-manger's Journal on Software Engineering, India, (http://www.imanagerpublications.com/ManagementEditorial.aspx).
- Member of editorial board of Transactions on Signals Systems & Devices, Germany, (http://www.ssd-conf.org/.)
- Member of editorial board of the Philadelphia Cultural Journal.
- Local Chair of Middle East Conf. On Simulation & Modeling (2000- up-to-date)
- Member of Philadelphia University Council (1998-2002, 2007-uptodate)
- Member of Dean Council (2007- up-to-date).

### **1994-1997**: Associate Professor, University of Technology, Iraq:

- Postgraduate Tutor: Control & Computer Eng. Dept., UOT (1992-1996).
- Member of the University Council, UOT, (1995-1997).
- Head of Computer & Software Eng. Dept, UOT, (1996-1997).
- Member of editorial board "Engineering & Technology Magazine", UOT, (1995-97).
- Editor of "Computer Research Magazine", Federation of Arab Scientific Research Council, (1995-1998).
- **1992-1994**: Head of Postgraduate Studies & Scientific Research, UOT.
- **1990-1992**: Lecturer & Head Deputy, Control & Computer Eng. Dept., UOT.
- **1986-1989:** Ph.D. Research Student, University of Liverpool, England.
- **1984-1986**: Research Assistant, Electronics & Computer Research Center, Iraq. Member of editorial board "Computer & Communication World Magazine", UK.
- **1983-1984**: Assistant Lecturer, University of Technology, Baghdad.

### **Prizes and Awards:**

- **1986:** Office of the President in Iraq: The prize for the best textbook in the field of computer.
- **1989:** IEE, UK, The prize for best paper (research student), The 4<sup>th</sup> International conference on electrical machines & drives.
- **1994 & 1995:** University of Technology, Iraq, The prize for best scientific researcher at the university.

- **1996:** Iraq, The prize for best scientific researcher in Iraqi universities (engineering disciplines).
- **2000:** Philadelphia University, Jordan; Award for excellence in scientific research.
- 2004: Jordanians Engineers Association: First Prize for the best graduate project in Electrical Engineering.
- **2005:** EuroSis, Portugal, Award for best applied research in the field of modeling and simulation, The 7<sup>th</sup> Middle East conference on Simulation & Modeling.
- **2010:** Arab award for innovation and excellence in scientific research: The Arab Network for Open Learning and Distance Learning.
- **2020:** International Scientist Awards 2020 on Engineering, Science and Medicine, VDGOOD, Technology Factory, India.

### Subject Taught:

### Postgraduate Courses:

Embedded and distributed real-time systems, Advanced measurement systems, Intelligent control, Advanced digital control, Real-time systems, Drive systems, Advanced computer architecture, Advanced microprocessors, Computer control, Fuzzy logic for Computer Science, Neural networks & genetic algorithms.

#### • Undergraduate Courses:

Real-time systems. Embedded systems design. Drive systems, Sensors and actuators, Expert systems. Microprocessor control, Robotics and automation, Digital control, Logic circuits, Microprocessor interfacing and programming, Computer control, Computer architecture, Advanced logic circuits, Advanced computer architecture, Data acquisition systems, Digital electronics, Computer networks, Software engineering.

# **PROFESSIONAL AFFILIATIONS:**

- Member: International Association of Engineers "IAENG", (USA), Membership No: 105774)
- Member: Institution of Electrical Engineers "IEE", (UK), Membership No: 21815397.
- **Senior Member:** Institute of Electrical & Electronic Eng. "IEEE", (USA), Membership No: 41277551.
- **Member:** The Society of Computer Simulation International "SCS", (USA), Membership No: 103334.
- Member: Association for Computing Machinery "ACM" (USA), Membership No: 5249966.
- **Member:** Arab Network for Open & Distance Education, (Jordan).

# **PUBLICATIONS:**

- **1. BOOKS:** FOURE published books in the field of computers (in Arabic).
- **2. ARTICALS:** More than 30 scientific articles about expert systems, computer technology, programming, interfacing & applications.

### 3. THESIS:

- A Microprocessor-based Monitoring System for Automobiles, *Higher Diploma Thesis, UOT, Baghdad,* 1981.
- A Microprocessor-based Digital System for DC Motor Speed and Position Control, *M.Sc. Thesis, UOT,* 1982.
- Intelligent Sensing & Real-Time Computing of PM Drive Systems, *Ph.D. Thesis, University* of Liverpool, UK, 1989.

- **4. PAPERS:** More than ninety scientific papers and three chapters in books concerning the computer technology and applications in the engineering fields, as given in appendix (1).
- 5. THESIS SUPERVISION: More than thirty thesis submitted for Ph.D. and M.Sc. degrees.

### Appendix (1)

# PUBLISHED PAPERS

- 1. Microcomputer-based controller for position and speed of a DC servomotor, *IEEE conference*, *[IECON'84]*, *Tokyo 1984*.
- 2. Microcomputer-based programmable PID controller for process system, *Inter. Syp. on Mini & Microcomputer and Their Application, [MIMI'85], Spain 1985.*
- 3. Microcomputer-based new instrument technique of angular velocity for real-time application, *IEEE Conf., [IECON'85], USA 1985.* EID: 2-s2.0-0022335078.
- 4. Design and implementation of simple digital controller for process control, 4<sup>th</sup> Scientific Conf., Baghdad 1986.
- 5. PWM control of DC servo motor, *IASTED Conf.*, *[RAI'86]*, *France 1986*.
- 6. A self-commutating PM machine with implicit rotor position sensing using search coils, 4<sup>th</sup> Intr. Conf. On Electr. Machines & Drives, London 1989, pp.53-56. EID: 2-s2.0-0024876487.
- 7. Implicit rotor position sensing using search coils for a self-commutating PM drive system, *IEE Proceedings, Vol.137, Pt.B, No.4, July 1990, pp.*253-258, DOI: 10.1049/ip-b.1990.0030, EID: 2-s2.0-0025464744
- 8. Implicit rotor position sensing using motor windings for a self-commutating PM drive system, *IEE Proceedings, Vol.138, Pt.B, No.1, January 1991, pp.28-34.* DOI: 10.1049/ip-b.1991.0004, EID: 2-s2.0-0026000130
- 9. Implicit rotor position sensing using for a self-commutating machine drives, *Intr. Conf. On Electr. Machines [ICEM'90], Paper No.17-3, MIT, Cambridge USA, August 1990.*
- 10. Microcomputer-based speed & load angle measurement of PMSM without using mechanical sensors, *Scientific Report, Liverpool University, England. September 1988.*
- 11. Microcomputer-based real-time control of a self-commutating PM drive system, *Scientific Report, Liverpool University, England. November 1988.*
- 12. Design and implementation of a PC-based events recorder, *Engineering and Technology* Magazine, Vol.12, No.11, Nov. 1993.
- 13. Design and evaluation of a fuzzy logic rule-based controller. 11<sup>th</sup> Inter. Conf. On Applied Informatics, Paper No.(204-066), France 1993.
- 14. Computer control and flexible manufacturing systems. Union of Arab Scientific Research Councils Syp. on Robotics, 4-6 May, Baghdad 1993.
- 15. Application of fuzzy logic algorithm for control of industrial plants. 11<sup>th</sup> Iraqi Engineering Conf., 22-25 Nov., Baghdad 1994.
- 16. Design and implementation of a PC-based tesseral addressing system. 11<sup>th</sup> Iraqi Engineering Conf., 22-25 Nov., Baghdad 1994.
- 17. Real-time control of DC drives using fuzzy algorithms. *Engineering and Technology Magazine*, *Vol. 13, No.9, Sept. 1994.*
- 18. Real-time Microcomputer Control of Sensorless AC Machines. 1<sup>st</sup> Iraqi Technological Conf., Baghdad 1995.
- 19. Load angle measurement of sensorless AC machines. CATAEE'95 Conf. Philadelphia University, Jordan 1995.
- 20. Self-organizing fuzzy logic controller; design & implementation. CATAEE'95 Conf. Philadelphia University, Jordan 1995.
- 21. Use of fuzzy logic for implementing rule-based control of a flexible link manipulator. *Robotics and automation symposium, Baghdad 1995.*

- 22. Trajectory planning and tracking of a robot manipulator. *Robotics and automation symposium, Baghdad 1995.*
- 23. Fuzzy logic control of a distillation column. 2<sup>nd</sup> Iraqi Technological Conf., May 1996.
- 24. Expert workstation as an instructional tool using fuzzy logic. 2<sup>nd</sup> Iraqi Technological Conf., May 1996.
- 25. Real-time tuning of PID controllers using fuzzy logic algorithms. *Accepted to be published in Engineering and Technology Magazine.*
- 26. Design and performance of on-line fuzzy tuning algorithm for conventional PID controllers, *JTEA* '96 Conference, Tunis, Paper No. 70, Nov. 96.
- 27. Decision-making in expert education system using fuzzy logic. *Computer research magazine*, *No.1, 1996*.
- 28. Advisory expert system for post graduate students. Computer research magazine, No.2, 1996.
- 29. Distillation column control using fuzzy logic. *The 1<sup>st</sup> Algerian congress of process control, Algeria, Oct. 1996.*
- 30. Computer control of a distillation column using fuzzy logic decouplers. The 9<sup>th</sup> Intr. Conf. on Computer Theory and Applications, Egypt, Sept. 1996.
- 31. Fuzzy advisory system for student registration in the technical institutes. *College of Engineering Conference, Al-Mystansirya University, Baghdad, April 1997.*
- 32. Decision-making in intelligent distributed computer systems. *The 1<sup>st</sup> Baghdad Conf. For Electr. Eng., Baghdad 1997.*
- 33. Student modeling in expert education systems using fuzzy logic. *The 2<sup>nd</sup> Conf. of Computer Technology & Applications, Union of Arab Scientific Research Councils, Baghdad 1997.*
- 34. Fuzzy logic & computer aided instruction systems. Optimum Applications of Computer Technology Symp. Tripoli, 1998.
- 35. A fuzzy expert tool for educational system design. Software Eng. Education Symposium (SEES'98), 18-20 November 1998, Poland.
- 36. An expert advisor for course selection in universities and higher institutes. *Engineering Conf.* '98, *Libya 1998*.
- 37. Fuzzy logic and industrial computer control systems. Eng. Conf. '98, Libya 1998.
- 38. A Virtual reality based educational module for knowledge learning & skills training, 1<sup>st</sup> Arab Conference for Software Industry & development, Amman 11-13 July 1999.
- 39. Design of a programmable bus for microprocessor-based systems, 3<sup>rd</sup> International Conference IEE-CATAEE99, Page (165-169), Amman 19-20 October 1999.
- 40. Neural network-based fuzzy identifier: design & evaluation, *IEEE-ACIDCA'2000 Conf., Page* (108-113), Vol. (IM), Tunisia 22-24 March 2000.
- 41. A hierarchical manufacturing route planner based on heuristic algorithm, *IEEEACIDCA'2000 Conf., Page (214-220), Vol. (EIA), 22-24 March 2000.*
- 42. Modeling an Interactive FMS scheduler Using Colored Petri Nets, *IEEE/SCS 2<sup>nd</sup> Middle East Conf. On Simulation & Modeling, Page (54-61), 28-30/8/2000.*
- 43. A Real-Time Hierarchical Controller for Robots in Flexible Manufacturing Systems, *Intr. Conf. On Smart Systems & Devices, Page:(494-498), Sfax 27-30/3/2001.*
- 44. A Hierarchical Manufacturing Route Planner Based on Heuristic Algorithm: Design & Evaluation, Systems Analysis Modeling Simulation Journal (Merged with the International Journal of Systems Science, http://www.tandf.co.uk/journals/listings/s.asp),*Published By:* Taylor & Francis, USA, Vol. 42, Page: (1119-1141), USA, 2002.
- 45. Development of a Web-Based Distance Learning System Using Fuzzy Decision Making, Intr. Conf. On Smart Systems & Devices, Tunisia, March 2003.
- 46. A Software Tool for Web-Based Distance Learning System design, Virtual Education & Distance Learning Conference, Page (1-7), December 2003.
- 47. Neural Network Based Fuzzy Identifier: Design & Evaluation, Asian Journal of Information Technology, Page (188-196), Vol. 13, No. 3, March 2004.

- 48. Modeling and Analysis of an On-Line FMS Scheduler Using Colored Petri Nets, *International Journal of Computing and Information Sciences (IJCIS), Vol.2, No. 2, Page (74-83), August 2004.*
- 49. A Hierarchical Nero-Fuzzy MRAC of a Robot in Flexible Manufacturing Environment" *The International Arab Journal of Information Technology, Page (209-214), Vol. 1, No. 2, July 2004.* EID: 2-s2.0-33746382253.
- 50. Novel Technique to Control the Premature Infant Incubator System Using Artificial Neural Network, 3<sup>rd</sup> Intr. Conf. on Signals, Systems, Devices (SSD05), Paper Ref. SAC-17, Tunisia, 21-24 March, 2005.
- 51. Real-Time Fuzzy Control of a Sensorless PM Drive System, 3<sup>rd</sup> IEEE Intr. Conf. on Systems, Signals, Devices (SSD05), Paper Ref. PES-115, Tunisia, 21-24 March, 2005.
- 52. A Fuzzy Decision Maker for Web-Based Distance Learning Systems, *Transactions on Systems*, *Signals & Devices*, Vol. 1, No. 3, PP.263-274, Germany, 2005.
- 53. Simulation and FPGA Implementation of a Simple Computer, 7<sup>th</sup> Middle East Conf. On Simulation & Modeling, MESM2005, Portugal, Page: (151-158), 24-26 October, 2005. EID: 2-s2.0-84899027156.
- 54. Applying Fuzzy Logic for Learner Modeling and Decision Support in Online Learning, *IManager's Journal of Educational Technology, Vol. 2, N. 3, Page:(76-85), October 2005.*
- 55. Fast Energy Loss Computation & Fuzzy-Based Shunt Capacitor Insertion, 8<sup>th</sup> Middle East Conf. On Simulation & Modeling, MESM2006, Page: (141-150), 28-30 September, Egypt 2006. EID: 2-s2.0-84898936584.
- 56. Fast Energy Loss Computation and Shunt Capacitor Insertion Using Fuzzy Logic Technique, *American Journal of Applied Sciences*, Since Publications, USA, *Vol. 4, No. 1, Page ( 3539)*, 2007. DOI: 10.3844/ajassp.2007.37.41, EID: 2-s2.0-34447117770.
- 57. Neuro-Fuzzy Controller of PM Motor Drives for Washing Machines, 4<sup>th</sup> IEEE Intr. MultiConf. on Systems, Signals, Devices (SSD7), Tunisia, 19-22 March, 2007.
- 58. Teaching Computer Organization and Architecture Using Simulation and FPGA Applications. American Journal of Computer Science, Since Publications, USA, Vol.3, No.8, Page (624-632) August 2007.
- 59. Web-Based Laboratory Interactive Learning Using Mixed Reality Environment, Interactive Computer Aided Learning "ICL2007", Austria, 24-26 September, 2007.
- 60. Mixed Reality Environment for Web-Based Laboratory Interactive Learning, International Journal of Online Engineering, Vol.4, No.1, January 2008.
- 61. Fuzzy Logic Control Implementation in Sensorless PM Drive Systems, *Transactions on Systems, Signals & Devices, Vol. PES-3, No. 2, Page(211-224), Germany, 2008.*
- 62. FPGA Implementation of Fuzzy Inference System, *IASTED Intr. Conf. on Advances in Computer Science and Technology (ACST 2008), Paper No: 605-233, 2-4 April 2008, Langkawi, Malaysia.* EID: 2-s2.0-62649159385.
- 63. Mixed Reality Based Distance Laboratories, Arab Conference on Information and Issues of Arab Development: Visions and Strategies, Egypt, 22-24 March 2009.
- 64. Windows-Based Active-Router Design and Evaluation, 6<sup>h</sup> IEEE Intr. Multi-Conf. on Systems, Signals, Devices (SSD7), Paper No: 1569173389, Tunisia, 23-26 March, 2009. DOI: 10.1109/SSD.2009.4956813, EID: 2-s2.0-67650517564
- 65. FPGA-Based Fuzzy Inference System for Real-time Embedded Applications, Journal of Intelligent & Fuzzy Systems, International Journal of Real-Time Systems, Vol.1, No.1, Page (9-15), January 2010.
- 66. Design and Evaluation of a Fuzzy-Based CPU Scheduling Algorithm, *International Conference* on Recent Trends in Business Administration and Information Processing (BAIP), Paper No:32, India, 26-28 March, 2010. DOI: 10.1007/978-3-642-12214-9-9, EID: 2-s2.0-77950569273.

- 67. Maximum Power Point Neuro-Fuzzy Tracker for Photovoltaic Arrays, 8<sup>th</sup> IEEE Intr. MultiConf. on Systems, Signals, Devices (SSD11), Tunisia, 22-25 March, 2011. DOI: 10.1109/SSD.2011.5767385, EID: 2-s2.0-79957881384.
- 68. Towards Self-Configurable Overlay Networks, 8<sup>h</sup> IEEE Intr. Multi-Conf. on Systems, Signals, Devices (SSD11), Tunisia, 22-25 March, 2011. DOI: 10.1109/SSD.2011.5767490, EID: 2-s2.0-79957913185.
- 69. The State of Engineering Postgraduate Studies in Iraqi Universities, Institute for International Education Conference on "Reconstruction of Iraqi Higher Education PostConflict", Amman, January, 2011.
- 70. Autonomic multimedia delivery services self-configuration, Transactions on Systems, Signals & Devices, ISSN: 1861-5252, Shaker Verlag, Germany, 2011.
- 71. Autonomic Service Specific Overlay Networks Resource Discovery", Journal of the Network and Systems Management, ISSN: 1064-7570, Springer, 2011.
- 72. Fuzzy-Based Gang Scheduling Approach for Multiprocessor Systems, 9<sup>th</sup> IEEE Intr. MultiConf. on Systems, Signals, Devices (SSD12), Germany, 20-23 March, 2012. DOI: 10.1109/SSD.2012.6197911, EID: 2-s2.0-84861624841.
- 73. GPRS-Based Remote Sensing and Teleoperation of a Mobile Robot, 10<sup>th</sup> IEEE Intr. MultiConf. on Systems, Signals, Devices (SSD13), Tunisia, 18-21 March, 2013. DOI: 10.1109/SSD.2013.6564166, EID: 2-s2.0-84883110334
- 74. Embedding Mixed-Reality Laboratories into E-Learning Systems for Engineering Education, *International Conference on E-Learning and Blended Education (ICELBE2013), Jordan, 2013.*
- 75. Real-Time Monitoring and Intelligent Control for Greenhouses Based on Wireless Sensor Network, 11<sup>th</sup> IEEE Intr. Multi-Conf. on Systems, Signals, Devices (SSD14), Barcelona, 1114 February, 2014. DOI: 10.1109/SSD.2014.6808765, EID: 2-s2.0-84901372942.
- 76. An Efficient Media Ports Resource Discovery For Service Networks, *International Journal of Business Information Systems*, Vol. 15, No. 2, pp. 222-243, 2014. DOI: 10.1504/IJBIS.2014.059254, EID: 2-s2.0-8489441966.
- 77. Dual-Robot Navigation System for Real-Time Sensing and Monitoring, *The 15th International* Workshop on Research and Education in Mechatronics (REM2014), ElGouna, Egypt, 9-11 September 2014. DOI: 10.1109/REM.2014.6920442, EID: 2-s2.0-84909595124
- 78. Multi-Robot Task Scheduling and Routing Using Neuro-Fuzzy Control, 12<sup>th</sup> IEEE Intr. Multi-Conf. on Systems, Signals, Devices (SSD15), Mahdia-Tunisia, 16-19 March, 2015. DOI: 10.1109/SSD.2015.7348097, EID: 2-s2.0-84962739096.
- 79. Real-Time Patient Health Monitoring and Alarming Using Wireless-Sensor-Network, 13<sup>th</sup> IEEE Intr. Multi-Conf. on Systems, Signals, Devices (SSD16), Leipzig, Germany 21-24 March, 2016. DOI: 10.1109/SSD.2016.7473672, EID: 2-s2.0-84974575324
- 80. Real-time healthcare monitoring system using wireless sensor network, *Int. J. of Digital Signals and Smart Systems, Vol.1, No.1, pp.26-42.*
- Wireless Control of a Human Replacement Robot: Design and Implementation, 14<sup>th</sup> IEEE Intr. Multi-Conf. on Systems, Signals, Devices (SSD17), Marrakech, Morocco, 28-31March, 2017. DOI: 10.1109/SSD.2017.8166913, EID: 2-s2.0-85046664564.
- 82. Design and implementation of real-time scheduling algorithms for flexible manufacturing systems, *Int. J. of Advanced Mechatronic Systems*, Vol. 7, No. 4, pp.202–212, 2017. DOI: 10.1504/IJAMECHS.2017.089605, EID: 2-s2.0-85041390177.
- 83. Wireless Sensor Network Based Real-Time Monitoring and Control for Factory Automation, 15<sup>th</sup> IEEE Intr. Multi-Conf. on Systems, Signals, Devices (SSD18), Hammamat, Tunisia, 1822 March, 2018. DOI: 10.1109/SSD.2018.8570631, EID: 2-s2.0-85060632151.
- 84. Cooperative Search and Rescue of Swarm of Robots Using Binary Dragonfly Algorithm, 15<sup>th</sup> IEEE Intr. Multi-Conf. on Systems, Signals, Devices (SSD18), Hammamat, Tunisia, 18-22 March, 2018. OI: 10.1109/SSD.2018.8570410. EID: 2-s2.0-85060626071.

- 85. Fuzzy-Based Gang Scheduling Approach for Multiprocessor Systems, Chapter in Book, Advances in Systems, Signals and Devices, De Gruyter, Oldenbourg, Germany, 2018, pp:81-96. DOI: https://doi.org/10.1515/9783110470383.
- 86. Fuzzy-Based Gang Scheduling Approach for Multiprocessor Systems, *Chapter in Book entitled "Communication, Signal Processing & Information Technology", De Gruyter Oldenbourg, Germany, 2018, https://doi.org/10.1515/9783110470383.*
- 87. Wireless Sensor Network Based Real-Time Monitoring and Control for Factory Automation, *Chapter in Book entitled "New Trends in Robot Control", Springer (To be published soon).*
- 88. Wireless Sensor Network Based Real-Time Monitoring and Fault Detection for Photovoltaic Systems, 16<sup>th</sup> IEEE Intr. Multi-Conf. on Systems, Signals, Devices (SSD19), Istanbul, Turkey, 21-24 March, 2019. DOI: 10.1109/SSD.2019.8893245. EID: 2-s2.0-85075632558
- 89. Wheelchair Neuro Fuzzy Control Using Brain Computer Interface, *The 12th International Conference on the Developments in eSystems Engineering (DeSE2019), Kazan, Russia, 7-10 October, 2019.* DOI: 10.1109/DeSE.2019.00120, EID: 2-s2.0-85084403106.
- 90. Intelligent Scheduling of Mobile Robots in Flexible Manufacturing Systems, 17<sup>th</sup> IEEE Intr. Multi-Conf. on Systems, Signals, Devices (SSD20), Tunisia, 20-23 July, 2020.
- 91. Wheelchair Neuro Fuzzy Control and Tracking System Based on Voice Recognition, Sensors, 2020, Vol.20, May 2020, 2872; doi:10.3390/s20102872.
- 92. Remote Solar Energy Lab Experiments; Measuring and Monitoring, *Submitted to the* 4<sup>th</sup> International Conference on Smart Learning (ICSL2020), Jordan, 14-16 April, 2020.
- 93. Towards Intelligent Control of Electric Wheelchairs for Physically Challenged People, *Chapter* in Book entitled "Advanced Sensors and Systems for Biomedical Applications", Springer (To be published soon).
- 94. Design and Construction of a Low Cost Portable Cardiopulmonary Resuscitation and Ventilator Device, 17<sup>th</sup> IEEE Intr. Multi-Conf. on Systems, Signals, Devices (SSD20), Tunisia, 20-23 July, 2020.
- 95. Design and Evaluation of a MIMO ANFIS using MATLAB and V-REP, 10<sup>th</sup> International Conference on Recent Trends in Communication and Computer Networks (ComNet 2020). September 25-26, 2020. Chennai, India.
- 96. IoT-Based Real-Time Monitoring System for Epidemic Diseases Patients; Design and Evaluation, *Submitted for publication in International Indexed Journal*.