Prof. Kasim Mousa Alwan AL-AUBIDY

PhD, Computer Control Engineering, University of Liverpool, UK, 1990
ORCID #: 0000-0001-7228-9921

www.semanticscholar.org/author/K.-Al-Aubidy/1402964901

Mechatronics Engineering Dept, Faculty of Engineering &Technology,
Box: 1, Philadelphia University, JORDAN, 19392.
Tel (work): +962-6-4799000 ext: 2501,
Fax: +962-6-4799037
Tel(mobile): +962-791521477
Email: kma@philadelphia.edu.jo, alaubidy@gmail.com

SPECIALIZATION:

- **Major:** Computer Control Engineering.
- **Minor:**- Design of Real-Time Computer Systems.
  - Intelligent Systems and Softcomputing Applications in Real-Time Systems.
  - Embedded Systems and IoT Applications.
  - 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, (2020-2023).
- Dean of Quality Assurance, (2020- 2022).
- Director of Engineering Office, Philadelphia University, (2016-2022).
- Editor-in-chief of the journal "Review of Computer Engineering Studies (RCES)", International Information & Engineering Technology Association, Canada, http://www.iieta.org/Journals/RCES/EDITORIAL%20BOARD
- Editor-in-chief of the i-manager's Journal on IoT and Smart Automation (JIOT), www.imanagerpublications.com/editorialboard/42/JournalonIoTandSmartAutomation
- Member of editorial board of International Journal of Reconfigurable and Embedded Systems (IJRES), p-ISSN 2089-4864, e-ISSN 2722-2608 (http://ijres.iaescore.com).
- Member of editorial board of i-manager's Journal on Software Engineering (JSE), imanagerpublications.com/editorialboard/3/JournalonSoftwareEngineering
- 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/EDITORIAL%20BOARD
- Chief Editor of Asian Journal of Information Technology (2004-2018), http://www.medwelljournals.com/eboard.php?jid=1682-3915.
- Chief Editor of International Journal of Real-Time Systems (2010-2012), http://www.serialspublications.com/journals1.asp?jid=370&dtype=2&jtype=1
- Chief Editor of International Journal of Soft Computing (IJSC), from 2006 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/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 W1lXkVkaXRvcmlhbEJvYXJkLmh0bbQ_0_0
- Member of editorial advisory board of Inter. Journal of Informatics Technologies. From 2017-2020. (http://www.ijit.info/editorial.html)
- Member of editorial board of International Journal of Reasoning-Based Intelligent Systems, (http://www.inderscience.com/jhome,php?jcode=ijris)
- Member of editorial board of International Journal of Mechatronics and Automotive Research. From 2017-up-to-date, (IJMAR), (https://scidoc.org/editorial_board50.php)
- 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 ARID International Journal for Science & Technology, Malaysia, (https://portal.arid.my/ar-LY/JournalPages/Details/26)
- Member of editorial board of the Philadelphia Cultural Journal.
- Local Chair of Middle East Conf. On Simulation & Modeling (2000-2014)
- 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 4th 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 7th 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.

2020: Best Applied Research Award at the 17th IEEE International Multi-Conference on Systems, Signals, Devices (SSD20), Tunisia, 20-23 July, 2020.

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:

o **Member**: International Association of Engineers "IAENG", (USA), Membership No: 105774)

o **Member:** Institution of Electrical Engineers "IEE", (UK), Membership No: 21815397.

o **Senior Member:** Institute of Electrical & Electronic Eng. "IEEE", (USA), Membership No: 41277551.

o **Member:** The Society of Computer Simulation International "SCS", (USA), Membership No: 103334 .

o **Member:** Association for Computing Machinery "ACM" (USA), Membership No: 5249966.

o **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 hundred 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 Fifty 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, *1985 IEEE International Conference on Industrial Electronics, Control and Instrumentation, [IECON'85], USA 1985, pp:697-702.* EID: 2-s2.0-0022335078.
4. Design and implementation of simple digital controller for process control, *4th Scientific Conf., Baghdad 1986.*
5. PWM control of DC servo motor, *IASTED Conf., [RAI'86], France 1986.*
6. Self-commutating PM machine with implicit rotor position sensing using search coils, *4th IEE 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. *11th 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. *11th Iraqi Engineering Conf., 22-25 Nov. , Baghdad 1994.*
16. Design and implementation of a PC-based tesseral addressing system. *11th 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. *1st 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. *2nd Iraqi Technological Conf., May 1996.*
24. Expert workstation as an instructional tool using fuzzy logic. *2nd 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 1st Algerian congress of process control, Algeria, Oct. 1996.*
30. Computer control of a distillation column using fuzzy logic decouplers. The 9th I*ntr. 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 1st Baghdad Conf. For Electr. Eng., Baghdad 1997.*
33. Student modeling in expert education systems using fuzzy logic. *The 2nd 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, *1st Arab Conference for Software Industry & development, Amman 11-13 July 1999.*
39. Design of a programmable bus for microprocessor-based systems, *3rd International Conference IEE-CATAEE99, Page (165-169), Amman 19-20 October 1999.*
40. Neural network-based fuzzy identifier: design & evaluation, *IEEE International Conference on Artificial and Computational Intelligence for Decision, Control and Automation in Engineering and Industrial Applications (ACIDCA'2000), Page (108-113), Vol. (IM), Tunisia 22-24 March 2000.*
41. A hierarchical manufacturing route planner based on heuristic algorithm, *IEEE International Conference on Artificial and Computational Intelligence for Decision, Control and Automation in Engineering and Industrial Applications (ACIDCA'2000),Page (214-220), Vol. (EIA), Tunisia, 22-24 March 2000.*

42. Modeling an Interactive FMS scheduler Using Colored Petri Nets, *IEEE/SCS 2nd Middle East Conf. On Simulation & Modeling, Jordan, August 2000, 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, No. 7, Page: (1119-1141), USA, 2002. www.tandfonline.com/doi/abs/10.1080/716067198.*

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. 3, No. 3, March 2004.* https://medwelljournals.com/abstract/?doi=ajit.2004.188.196

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. *https://iajit.org/PDF/vol.1,no.2/08-Alobaidy.pdf*

50. Novel Technique to Control the Premature Infant Incubator System Using Artificial Neural Network, *3rd 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, *3rd 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, *7th 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, *i-Manager's Journal of Educational Technology, Vol. 2, N. 3, Page:(76-85), October 2005.*

55. Fast Energy Loss Computation & Fuzzy-Based Shunt Capacitor Insertion, *8th 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*, 4th 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. https://doi.org/10.3844/jcssp.2007.624.632

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, *6ʰ 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, 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, *8th 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, *8ʰ 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 and Devices, Issues on Communication & Signal Processing, Shaker Verlag, Germany, ISSN: 1861-5252, Vol. 6, No. 3, 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, *9th 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, *10th 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. I-manager's Journal of Educational Technology, Vol.9, No.4, January-March 2013, pp:25-35.*

75. Real-Time Monitoring and Intelligent Control for Greenhouses Based on Wireless Sensor Network, *11th 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, *12th 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, *13th 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, January, 2017, pp.26-42.*

81. Wireless Control of a Human Replacement Robot: Design and Implementation, *14th 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, *15th 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, *15th 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. Wireless Sensor Network Based Real-Time Monitoring and Fault Detection for Photovoltaic Systems, *16th 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

87. 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.

88. Intelligent Scheduling of Mobile Robots in Flexible Manufacturing Systems, *17th IEEE Intr. Multi-Conf. on Systems, Signals, Devices (SSD20), Tunisia, 20-23 July, 2020.*

89. Wheelchair Neuro Fuzzy Control and Tracking System Based on Voice Recognition, Sensors, 2020, Vol.20, No.10, May 2020, 2872; doi:10.3390/s20102872.

90. Remote Solar Energy Lab Experiments; Measuring and Monitoring, *Submitted to the* 4th International Conference on Smart Learning (ICSL2020), Jordan, 14-16 April, 2020.

91. Design and Construction of a Low Cost Portable Cardiopulmonary Resuscitation and Ventilator Device, *17th IEEE Intr. Multi-Conf. on Systems, Signals, Devices (SSD20), Tunisia, 20-23 July, 2020, DOI: 10.1109/SSD49366.2020.9364088.*

92. Design and Evaluation of a MIMO ANFIS using MATLAB and V-REP, *8th International Conference on Recent Trends in Communication and Computer Networks (ComNet 2020). September 25-26, 2020. Chennai, India. Published in: GRENZE International Journal of Engineering and Technology, Vol.6, No.2, pp:129-136, Grenze ID: 01.GIJET.6.2.11_2.*

93. IoT-Based Real-Time Monitoring System for Epidemic Diseases Patients; Design and Evaluation, *International Journal of Online and Biomedical Engineering, Vol.17, No.1, January 2021, pp63-82, DOI: 10.3991/ijoe.v17i01.18849.*

94. IoT Based Remote Laboratory for Solar Energy Experiments: Design and Implementation, *18th IEEE Intr. Multi-Conf. on Systems, Signals, Devices (SSD21), Tunisia, 22-25 March, 2021, DOI: 10.1109/SSD52085.2021.9429384.*

95. Towards Intelligent Control of Electric Wheelchairs for Physically Challenged People, *Chapter in Book entitled "Advanced Sensors and Systems for Biomedical Applications", Springer, July 2021, DOI: 10.1007/978-3-030-71221-1_11,* www.springerprofessional.de/en/towards-intelligent-control-of-electric-wheelchairs-for-physical/19370930

96. Portable Cardiopulmonary Resuscitation and Ventilator Device: Design & Implementation, *Chapter in Book entitled "Advanced Sensors and Systems for Biomedical Applications",*

Springer, July 2021, DOI: 10.1007/978-3-030-71221-1_7, www.springerprofessional.de/portable-cardiopulmonary-resuscitation-and-ventilator-device-des/19370946.

97. Embedded Control Unit Design for Energy Management in Smart Homes, *Bulletin of Electrical Engineering and Informatics (BEEI), Vol.11, No.5, October 2022, pp. 2537~2546, ISSN: 2302-9285, DOI:10.11591/eei.v11i54103.*

98. Reverse Engineering Based PSA Chemical Oxygen Concentrators Design, *19th IEEE Intr. Multi-Conf. on Systems, Signals, Devices (SSD22), Algeria, 6-10 May, 2022, DOI: 10.1109/SSD54932.2022.9955786.*

99. Employing Interactive Mixed Reality in Remote Laboratories for Applied Disciplines. *The 4th International Conference on Smart Learning (ICSL2022), 26-27 October, 2022, Jordan.*

100. IoT-Based Mixed Reality Laboratories in Applied Disciplines, *ARID International Journal for Science & Technology (AIJST), Malaysia, Vol.5, No.10, December 2022, pp:39-61.*

101. Energy Management in Microgrids with Renewable Energy Sources and Energy Storage System, *20th IEEE Intr. Multi-Conf. on Systems, Signals, Devices (SSD23), Tunisia, 20-24 February 2023.*

102. IoT-Based Real-Time Management System for Fish Farm; Monitoring and Management, *Bulletin of Electrical Engineering and Informatics, Vol.12, No. 3, pp:1435-1446, June 2023, DOI: 10.11591/eei.v12i3.3365*

103. Load position and anti-swing control for a tower crane using neuro fuzzy controller, *TELKOMNIKA (Telecommunication Computing Electronics and Control), Vol. 21, No. 4, August 2023, pp. 891-900, DOI: 10.12928/TELKOMNIKA.v21i4.24044.*

104. ANFIS Based MPPT Controller for DC Motor Drives Supplied by PV Power System. *Submitted for publication.*

105. Intelligent Controller for Energy Management System in Grid-Connected Microgrid, *Sent for publication.*

106. ANFIS-Based Controller for Permanent Magnet Synchronous Motor Drives, *The 1st* International Conference on Renewable Solutions for Ecosystems: Towards a Sustainable Energy Transition, 6-8 May 2023, Algeria.

107. Real-Time Monitoring and Assessment of the Indoor Air Quality Hazard Index using a Deep Learning Approach, i-manager's Journal on IoT and Smart Automation (JIOT), Vol. 1, No. 1, June 2023.

108. Wireless Sensor Networks for Factory Automation Monitoring and Control, *Chapter in Book entitled "Advances in Sensors, Circuits & Diagnosis", Springer (To be published soon).*