

Curriculum Vitae

Name: Ahmed J. Abougarair

Academic Degree: Professor

Place of Work: University of Tripoli- Libya.

Collage: Faculty of Engineering

Department: Electrical and Electronic Engineering



PERSONAL DETAILS

Sex: Male

Date and Place of Birth: 1975, Sabha-LIBYA

Marital Status: Married

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Research gate:

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Publons Profile:

<https://publons.com/dashboard/summary/>

Google Scholar:

<https://scholar.google.com/citations?user=G63wZ6UAAAAJ&hl=en>

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LEADERSHIP AND MANAGENMENT EXPERIENCE

- ☐ Committee member of reviewing files and transcripts of graduates at EEE department.
- ☐ Head of committee to receive CCTV project at University of Tripoli.
- ☐ Director of the Administrative Quality Assurance Unit at EEE department
- ☐ Member of Quality Assurance Unit at faculty of engineering, University of Tripoli.
- ☐ Quality Assurance and Projects – Coordinator.
- ☐ Control and computer Lab. Coordinator.
- ☐ Member of Quality Assurance Unit at Libyan Open University, Tripoli, Libya.
- ☐ Supervising more than 50 undergraduate and postgraduate projects.
- ☐ Supervising and secret reviewer for M. Sc theses in University of Tripoli and the Libyan Academy for Postgraduate Studies.
- ☐ Member of the organization committee for the Fourth Libyan International Conference on Electrical and Electronic Engineering, 20-23/3/2006.
- ☐ Member of the organization committee for the Fifth Libyan International Conference on Electrical and Electronic Engineering, Tripoli-Libya, 2010.
- ☐ Reviewer of science papers in the Libyan Arab International Conference on Electrical and Electronic Engineering 2010, Tripoli-Libya.
- ☐ Member of the organization committee for the Libyan International Conference on Electrical Engineering and Technologies (LICEET2018), Tripoli, Libya, 3-5Mar. 2018.
- ☐ Member of the scientific committee of the First Conference for Engineering Sciences and Technology (CEST-2018), Sep. 25-27, 2018, Garaboulli, Libya.
- ☐ Member of the Committee for the establishment of courses, subjects and laboratories for Biomedical Engineering at the University of Tripoli, 2020, Libya.
- ☐ Member of the Admission Committee for Postgraduate Students, Department of Electrical and Electronic Engineering.
- ☐ Member of the Admission Committee for Postgraduate Students, Department of Management Engineering.

- Member of the scientific committee of the IEEE 1st Maghreb Meeting of the International conference on Sciences and Techniques of Automatic control and computer, 25-27 MAY ,2021, Tripoli, Libya.
- Member of the scientific committee of the Libyan Innovation Prize, 4-7 October ,2021, Tripoli, Libya.
- Member of the scientific committee of 1st Mosharaka International Conference on Control and Systems Engineering, 10-12 December 2021, Valencia, Spain.
- Member of the scientific committee of Second IEEE International Conference on Signal, Control and Communication (SCC 2021), 20-22 December 2021, Tunisia.
- Member of the scientific committee of Conference on Electrical Engineering & Information Technology (ICEEIT2021), 30-31 October 2021, Benghazi, Libya.
- Scientific chair in Conference on Electrical Engineering & Information Technology (ICEEIT2021), 30-31 October 2021, Benghazi, Libya.
- Member of the scientific committee of the IEEE 2nd Maghreb Meeting of the International conference on Sciences and Techniques of Automatic control and computer, 25-27 MAY ,2022, Sabrata, Libya.
- Guest Editor in a Special Issue, Automation, Control and Intelligent Systems, Artificial Intelligence Enhanced Manufacturing Automation Control Systems and Robotics,2022.
- Member of the scientific committee of the Libyan Innovation Prize, 4-7 October ,2022, Tripoli, Libya.
- Member of the scientific committee of the International Libyan Conference for Information and Communications Technologies (ILCICT 2022),27-30 March 2022,
- Member of the Technical program committee of the 8th International Conference on Engineering & MIS 2022, Turkey, 4-6 July, 2022.
- Member of the Technical program committee of the International Engineering Conference IEC2022 MU, Misurata University, October 2022.
- Member of the Technical program committee of the First Libyan International Conference On Engineering Science and Applications, Libyan Academy, 13-15 March 2023.

- Member of the scientific committee of Conference on Electrical Engineering & Information Technology (ICEEIT2022), 30-31 October 2021, Benghazi, Libya.
- Scientific chair in Conference on Electrical Engineering & Information Technology (ICEEIT2021), 30-31 October 2022, Benghazi, Libya.
- Member of the scientific committee of the IEEE 3rd Maghreb Meeting of the International conference on Sciences and Techniques of Automatic control and computer, 25-27 MAY ,2023, Benghazi, Libya.
- Member of the scientific committee of the 2023 IEEE International Conference on Advanced Systems and Emergent Technologies (IC_ASET'2023), from April 29 to May 1st, 2023, Hammamet, Tunisia.
- Member of the scientific committee of the First Libyan International Conference on Engineering Science and Applications, 13-15 March 2023, Libyan Academy Libya.
- Member of the scientific committee of Conference on Electrical Engineering & Information Technology (ICEEIT2023), 30-31 October 2023, Benghazi, Libya.
- Technical Committee Members of the 2023 International Conference on Computational Intelligence and Communication System (CCICS 2023), 28-29 December, Wuhan, China.
- Technical Committee Members of ISRAI2023 International Summit on Robotics and Artificial Intelligence, August 14-15, 2023 | Venue: Renaissance Heathrow Airport Hotel, London , UK.
- Technical Committee Members of the 2024 International Conference on Computational Intelligence and Communication System (CCICS 2024), June 27-28, 2024, Wuhan, China.
- Member of the scientific committee of the IEEE 4th Maghreb Meeting of the International conference on Sciences and Techniques of Automatic control and computer, 19-21 MAY ,2024, Tripoli, Libya.
- Member of the scientific committee of the 1st International Conference on Engineering Applications (ICEA'2024), ,15-17 October 2024, Engineering Academy Tajoura, Tajoura – LIBYA.
- Member of the committee scientific of Annual International Congress on Electrical Engineering, March 6-7, 2025, Oxford, United Kingdom.
- Member of the committee scientific of Journal of Engineering Research, university of Tripoli.

PROFESIONAL ACTIVITIES

- ☐ Reviewer for Azzetona University Journal.
- ☐ Member of editorial team of International Journal of Applied Science.
- ☐ Reviewer for Automation, Control and Intelligent Systems Journal.
- ☐ Editor member for Automation, Control and Intelligent Systems Journal.
- ☐ Reviewer for International Robotics & Automation Journal.
- ☐ Reviewer for WSEAS Transactions on Systems and Control Journal.
- ☐ Reviewer for WSEAS Transactions on Mathematics Journal.
- ☐ Reviewer for Journal of Engineering Research and Reports.
- ☐ Editor for International Journal of Robotics and Control Systems.
- ☐ Reviewer for The International Journal of Engineering and Information Technology (IJEIT)
- ☐ Reviewer for Computer and Information Systems. ISSN(Print): 1913-8989, ISSN(Online):1913-8997.
- ☐ Editor for Control Systems and Optimization Letters, ISSN: 2985-6116
- ☐ Reviewer for Journal of Engineering Research and Technology (JERT), ISSN 2312-2307.
- ☐ Member of editorial team of International Journal of Robotics and Automation Technology.
- ☐ Reviewer for Journal of Automation, Mobile Robotics and Intelligent Systems.
- ☐ Reviewer for Journal of Pure & Applied Sciences, Sebha University, Libya.
- ☐ Invited Speaker, International Conference on Machine Learning and Artificial Intelligence, October 21-23, 2024 | Edinburgh, UK.
- ☐ Reviewer for International Research Journal of Multidisciplinary Technovation, E-ISSN: 2582-1040.
- ☐ Honorable Editor for International Robotics & Automation Journal (eISSN: 2574-8092)
- ☐ Technical Committee Program for, 2024 International Conference on Computational Intelligence and Communication System, June 27-28, 2024, Wuhan, China.
- ☐ Reviewer for Engineering Journal, ISSN: 0125-8281.
- ☐ Reviewer for New Biotechnology, ISSN: 1871-6784.

- Editor for Multidisciplinary Journal of Engineering and Technology, Print ISSN: 3007-6897 Online ISSN: 3007-6900.
- Reviewer for IC_ASET'2025 (2025 IEEE International Conference on Advanced Systems and Emergent Technologies), Tunisa.
- Reviewer for 47th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Bella Center, Copenhagen, Denmark | July 14-17, 2025.
- Reviewer for 13th International Conference on Systems and Control (ICSC) 2025, October 22-24, 2025, Marrakesh, Morocco2025.
- Reviewer for The International Libyan Conference for Information and Communications Technologies ILCICT 2025, September 9 to 11, 2025, Tripoli, Libya
- Reviewer for 2nd Mosharaka International Conference on Mechanical Engineering and Technologies (MIC-EngMech 2026), Irbid, Jordan

RESEARCH INTERESTS

- *Intelligent control*
- *Neural networks*
- *Computer control system*
- *Genetic algorithms*
- *Frequency and time domains*
- *Robotics and Adaptive control*
- *Nonlinear control System*
- *Fuzzy Logic System*
- *Application of control System in Biomedical Engineering*

Papers Published

- 1- **Ahmed J. Abougarair**,” *Design and Simulation of Adaptive Controller for Nonlinear System Using Artificial Neural Network*”. The fourth Libyan Arab International Conference on Electrical and Electronic Engineering, March 20-23, 2006, Libya.
- 2- **Ahmed J. Abougarair**, ” *Neural Networks Techniques Applied to Enhancement of Closed-Loop Controller for Real Plant with Unknown Nonlinearities* ”, International Conference on Aeronautical Science and Air Transportation, ICASAT, 2007, Libya.
- 3- **Ahmed J. Abougarair**, Elfituri Lahmer, and Abdhamed M. Alcrewi,” *Identification Of An Acceptable Nonlinear Model Using Optimization Of Linear Identification And Artificial Neural Networks* ”, ICCNDT 2012, Bahrain.
- 4- **Ahmed J. Abougarair**,” *Design and Simulation of PFC Circuit for AC/DC Converter Based on PWM Boost Regulator*, International Journal of Automation and Power Engineering, pp 124-128, 2012.
- 5- **Ahmed J. Abougarair**,”*Hydrogen and Fuel Cells Towards a Sustainable Energy Future*”, ICEECMPE International Conference, November 2013, India.
- 6- **Ahmed J. Abougarair**, ”*Intelligent Controller Design for Nonlinear Chemical Process using neural Networks*”, International Academic Conference on Electrical, Electronics and Computer Engineering (IACEECE), 2013.
- 7- **Ahmed J. Abougarair**, ”*Simulation of the Different Position on the E-type Round Diaphragm and the Length of the Beam*”, IOSR Journal of Electrical and Electronics Engineering, Volume 7, Issue 5, www.iosrjournals.org, 2013.
- 8- **Ahmed J. Abougarair**, ” *Design and Simulation Observer Based Controller for Nonlinear System Based Feedback Linearization*”, International Journal of Electrical, Electronics and Data communication, Vol. 2, Issue1, 2014.
- 9- **Ahmed J. Abougarair**, ” *Measuring The Difference Between PID And FLC for DC motor*”, International Journal of Electrical, Electronics and Data Communication, Volume-2, Issue-10, 2014
- 10- **Ahmed J. Abougarair**,”*Modelling and Different Controller Design for Stabilizing Nonlinear System*”, Azzaytuna University Journal , 2015.
- 11- **Ahmed J. Abougarair**, ” *Simulation Studies of Continuous Stirred Tank Reactor Using Artificial Neural Network Based Supervised Control Method* ”, The 1st International Conference on Chemical, Petroleum, and Gas Engineering (ICCPGE 2016), 20– 22 December 2016, Libya.
- 12- **Ahmed J. Abougarair** ,” *Segmentation of road borders Based on Texture Features*”,

Azzaytuna University Journal , 2016.

13- **Ahmed J. Abougarair** ,” *Mobile Robot Trajectory Tracking Using Combined Two Level Controllers*”, Azzaytuna University Journal ,pp 21-41,Vol. 2, Issue 23, 2017.

14- **Ahmed J. Abougarair** ,” *Design PID Controller using Dynamic Programming Algorithm Techniques under MATLAB/SIMULINK Applied to a Real Plant*”, The IRES 135th international conference, 2018, Moscow, Russia.

15- **Ahmed J. Abougarair**,”*Intelligent Control Design for Linear Model of Active Suspension System*, 30th International Conference on Microelectronics (IEEE), 2018, Tunisia.
DOI: [10.1109/ICM.2018.8703995](https://doi.org/10.1109/ICM.2018.8703995)

16- **Ahmed J. Abougarair** ,” *Balancing Control of Two Wheeled Mobile Robot Based on Decoupling Controller*”, International Journal of Control Systems and Robotics, 2018.

17- **Ahmed J. Abougarair**,”*Optimal Control Design For Wheeled Mobile Robot*”, Almadar Journal for Communications, Information Technology, and Applications, Vol. 05, No. 01, 2018.

18- **Ahmed J. Abougarair**,”*Dynamic Modeling and Hybrid Controller Design for Two Wheeled Self-balancing Robot* ”, Almadar Journal for Communications, Information Technology, and Applications, Vol. 05, No. 01 ,2018.

19- **Ahmed J. Abougarair**,”*Virtual Reality Animation of ANFIS Controller for Mobile Robot Stabilization*”, Journal of Engineering Research, No. 25, 2018.

20- **Ahmed J. Abougarair**,”*Optimal Estimator Design Based on Optimal Controller*”, Libyan International conference on Electrical engineering and technology, LICEE 2018.

21- **Ahmed J. Abougarair**,”*Model Reference Adaptive Control And Fuzzy Optimal Controller For Mobile Robot*”, Journal of Multidisciplinary Engineering Science and Technology, pp 9722-9728,Vol. 6, Issue 3, 2019, Germany.

22- **Ahmed J. Abougarair**,”*Controllers Comparison To Balancing And Trajectory Tracking A Two Wheeled Mobile Robot*”, International Robotics & Automation Journal, Vol. 5, Issue 1, 2019.

23- **Ahmed J. Abougarair**,” *The Solution of The Problem of Pfraud in The Papers by Using Inert Chip (TAG)*”, Azzaytuna University Journal, Vol. 5, Issue 31, September 2019.

24- **Ahmed J. Abougarair**, ”*Robust Control and Optimized Parallel Control Double Loop Design for Mobile Robot* ”, IAES International Journal of Robotics and Automation (IJRA), Vol. 9, No. 3, 2020.

25- **Ahmed J. Abougarair**, ” Neural Networks Identification and Control of Mobile Robot

Using Adaptive Neuro Fuzzy Inference System”, ICEMIS'20: Proceedings of the 6th International Conference on Engineering & MIS 2020, September. 2020, <https://doi.org/10.1145/3410352.3410734>.

- 26- **Ahmed J. Abougarair , Hanadi Gnan, Abdulhamid Oun and Saadedin Elwarshfani** “*Implementation of a Brain-Computer Interface for Robotic Arm Control*”, 2021 IEEE 1st International Maghreb Meeting of the Conference on Sciences and Techniques of Automatic Control and Computer Engineering (MI-STA2021),25-27 may,2021, Tripoli, Libya.
- 27- **Ahmed Abougarair and Mohamed Edardar**, “*Tracking Control with Hysteresis Compensation Using Neural Networks*”, 2021 IEEE 1st International Maghreb Meeting of the Conference on Sciences and Techniques of Automatic Control and Computer Engineering (MI-STA2021),25-27 may,2021, Tripoli, Libya.
- 28- **Ahmed Abougarair, Shada Elwefati and Moftah Bakush**, “*Control of Epidemic Disease Based Optimization Technique*”, 2021 IEEE 1st International Maghreb Meeting of the Conference on Sciences and Techniques of Automatic Control and Computer Engineering (MI-STA2021),25-27 may,2021, Tripoli, Libya. doi: 10.1109/MI-STA52233.2021.9464453
- 29- **Ahmed Abougarair, Weiam Saheri and Nasar Aldian Shashoa**, “*Recursive Least Squares Algorithm for MISO CARAMA Systems Utilizing Data Filtering*”, 2021 IEEE 1st International Maghreb Meeting of the Conference on Sciences and Techniques of Automatic Control and Computer Engineering (MI-STA2021),25-27 may, 2021, Tripoli, Libya.
- 30- **Ahmed J. Abogair, Mohamed Edardar, Nasar Aldian Shashoa and Wael Ataeb** ” Adaptive Traffic Light Dynamic Control Based on Road Traffic Signal from Google Maps”, The 7th International Conference on Engineering & MIS 2021 (CEMIS’21), October 11–13, 2021, Almaty, Kazakhstan, <https://doi.org/10.1145/3492547.3492584>.
- 31- **Nasar Aldian Ambark Shashoa, Ahmed J. Abougarair** Fault Detection Based on Validated Model of Data Filtering Based Recursive Least Squares Algorithm for Box-Jenkins Systems, 2021 Global Congress on Electrical Engineering (GC-ElecEng 2021), 10-11 December 2021, Valencia, Spain.
- 32- **Ahmed J. Abougarair, M. Edardar**, Adaptive Neural Networks Based Robust Output Feedback Control for linearized System, WSEAS Transactions on Computer Research, pages: 125-136, DOI: 10.37394/232018.2021.9.15,Volume 9, 2021.
- 33- **Ahmed J. Abougarair, Nasar Aldian Ambark Shashoa**, Model Reference Adaptive Control for Temperature Regulation of Continuous Stirred Tank Reactor, Second IEEE International Conference on Signal, Control and Communication (SCC 2021), December 20 – 22, 2021, Tunisia.

- 34- **Ahmed J. Abougarair**, M. Edardar, Online inversion of a nonlinear operator model using slope-intercept method, The 4th Conference on Engineering Science and Technology (CEST-2021). Journal of Alasmarya University: Basic and Applied Sciences Vol. 6, No. 5, December 2021, Special Issue for Forth Conference on Engineering Science and Technology (CEST-2021).
- 35- **Ahmed Abougarair**, M. Edardar, Lyapunov Redesign of Piezo Actuator for Positioning Control, 9th International Conference on Systems and Control. November 24-26, 2021, ENSICAEN, Caen, France. DOI: [10.1109/ICSC50472.2021.9666594](https://doi.org/10.1109/ICSC50472.2021.9666594)
- 36- **Ahmed J. Abougarair** , Ali Ben-Ashour and Adel A. Abosdel , Simulation Design and Hardware Implementation of Optimization Real Traffic Light Control System, **International science and technology Journal**, 2022.
- 37- **Ahmed J. Abougarair, Mohamed K. I. Aburakhis, Mohamed M. Edardar**, Adaptive Neural Networks Based Robust Output Feedback Controllers for Nonlinear Systems, International Journal of Robotics and Control Systems, Vol. 2, No. 1, 2022, pp. 37-56, ISSN: 2775-2658, <http://pubs2.ascee.org/index.php/ijrcs>.
- 38- **Ahmed J. Abougarair, Mohamed K. Aburakhis**, Design and implementation of smart voice assistant and recognizing academic words, International Robotics & Automation Journal, Volume 8 Issue 1 – 2022.
- 39- **Ahmed J. Abougarair**, Integrated Controller Design for Underactuated Nonlinear System, IEEE, Second International Conference on Power, Control and Computer Technologies (ICPC2T-2022), 1-3 March 2022.
- 40- **Ahmed J. Abougarair**, Electroencephalography Based Control Approaches to Wheelchair and Robot Arm Control, Al academia journal for Basic and Applied Sciences (AJBAS) volume 4/No. 1 April – 2022.
- 41- **Ahmed J. Abougarair**, “Real Time Classification for Robotic Arm Control Based Electromyographic Signal”, 2022 IEEE 2st International Maghreb Meeting of the Conference on Sciences and Techniques of Automatic Control and Computer Engineering (MI-STA2022), 23-25 may,2022, Sabrata, Libya.
- 42- **Ahmed J. Abougarair**, “Loads Instability Study of the Gas Turbine Blades for Al-Khums Power Station”, 2022 IEEE Sponsored Second International Conference on Advances in Electrical, Computing, Communications and Sustainable Technologies (ICAECT 2022), 21 - 22, April 2022, India.
- 43- **Ahmed J. Abougarair**, “Tracking Control of a Continuous Stirred Tank Reactor Using Advanced Control Algorithms “, IJEIT International Journal on Engineering and Information Technology, vol.8, no. 2, Misrata, June 2022.
- 44- **Ahmed J. Abougarair**, Munya Ali Arwin, Weiam Ali Saheri, Nasar Aldian Ambark Shashoa, Overview on Fault Detection and Isolation, 1st International Conference on Engineering and May 10-13, 2022, Konya, Turkey.

- 45- **Ahmed J. Abougarair**, Nagmden Miled Nasser, Abdulhamid A. Oun, Traffic Sign Classification Using Deep Learning Based Convolutional Neural Networks, Azzaytuna University Journal, issue 42, pp. 306-326, 2022.
- 46- **Ahmed J. Abougarair**, Nasar Aldian A. Shashoa, Mohamed K. Aburakhis, Performance of Anti-Lock Braking Systems Based on Adaptive and Intelligent Control Methodologies, Indonesian Journal of Electrical Engineering and Informatics (IJEI), 2022.
- 47- **Ahmed J Abougarair, Mohammed Elmaryul, Mohamed K Aburakhis**, Real time traffic sign detection and recognition for autonomous vehicle, International Robotics & Automation Journal, Volume 8, Issue 3, 2022.
- 48- **Ahmed J Abougarair**, Position and Orientation Control of a Mobile Robot Using Intelligent Algorithms Based Hybrid Control Strategies, Journal of Engineering Research (University of Tripoli), Issue (34), pp 67-86, September 2022.
- 49- **Ahmed J. Abougarair**, Optimal Control Synthesis of Epidemic Model, IJEIT International Journal on Engineering and Information Technology, vol.8, no. 2, Misrata, June 2022, Special Issue for the International Engineering Conference IEC2022 MU.
- 50- **Ahmed Abougarair**, Adel Emhemmed and Omran Salih, Optimization Wireless Power Transfer Using Simulation Relevant Parameters, IEEE 21st International Conference on Sciences and Techniques of Automatic Control and Computer Engineering (STA), 19-21 December 2022, Sousse -Tunisia.
- 51- **Ahmed Abougarair**, Adel Emhemmed and Omran Salih, Simulation Analysis and Control of Wireless Power Transfer for Implantable Medical Devices, IEEE 21st International Conference on Sciences and Techniques of Automatic Control and Computer Engineering (STA), 19-21 December 2022, Sousse – Tunisia.
- 52- **Ahmed J. Abougarair**, Nasar Aldian A. Shashoa, Widd E. Ben Guma, Design and Implementation of a Traffic Control System Based on Congestion, International Journal of Robotics and Automation Technology, pp. 96-105, September, 2022.
- 53- **Ahmed J. Abougarair** and Walaa Abdussalam Arebi, Smart Glove for Sign Language Translation International Robotics & Automation Journal, Volume 8, Issue 3, 2022.
- 54- A. arif, M. Antonio, M. Sadek, E. Umoh and A. Abougarair, “Sliding Mode Control Design for Magnetic Levitation System”, Journal of Robotics and Control (JRC), Vol. 3, Issue 6, 2022. <https://doi.org/10.18196/jrc.v3i6.12389>
- 55- Nasar Aldian Shashoa, Munya Arwin, Weiam Saheri and **Ahmed Abougarair**, A Comparison between Multi Stage Recursive Least Square Algorithm and Data Filtering Based Recursive Least Squares Algorithm for Parameter Estimation, Multi-Conference OCTA 2023on: Organization of Knowledge and Advanced Technologies held from 09-11 February 2023 at NSAS Al-Hoceima, Morocco.

- 56- **Ahmed Abougarair**, Alhsayn Amhathib, Mohamed Elmezughi and Ali Almaktoof, Supervisory Control and Simulation of Boiler Drum Water Level, 2023 IEEE International Conference on Advanced Systems and Emergent Technologies (IC_ASET'2023), from April 29 to May 1st, 2023, Hammamet, Tunisia. DOI: [10.1109/IC_ASET58101.2023.10150778](https://doi.org/10.1109/IC_ASET58101.2023.10150778)
- 57- A. Zrigan, **Ahmed J. Abougarair**, Mohamed Elmezughi and Ali Almaktoof, Optimized PID Controller and Generalized Inverted Decoupling Design for MIMO System, 2023 IEEE International Conference on Advanced Systems and Emergent Technologies (IC_ASET'2023), from April 29 to May 1st, 2023, Hammamet, Tunisia.
- 58- N. Aldian Shashoa, **A. Abougarair**, W. Saheri and M. Arwin, Feature Extraction for Fault Diagnosis Based on Recursive Generalized Extended Least Squares Algorithm, 2023 IEEE International Conference on Advanced Systems and Emergent Technologies (IC_ASET'2023), from April 29 to May 1st, 2023, Hammamet, Tunisia.
- 59- **Ahmed J. Abougarair** and Ifaw Buzkhar, Modeling and Control of a Two-Wheeled Robot Machine with a Handling Mechanism, 2023 IEEE 3rd International Maghreb Meeting of the Conference on Sciences and Techniques of Automatic Control and Computer Engineering (MI-STA2023), 21-23 May, 2023, Benghazi, Libya.
- 60- **Ahmed J. Abougarair**, Adaptive Neural Networks Based Optimal Control for Stabilizing Nonlinear System, 2023 IEEE 3rd International Maghreb Meeting of the Conference on Sciences and Techniques of Automatic Control and Computer Engineering (MI-STA2023), 21-23 May, 2023, Benghazi, Libya.
- 61- Ali, S. Elmulhi, **Ahmed J. Abougarair**, Sliding Mode Control for the Satellite with the Influence of Time Delay, 2023 IEEE 3rd International Maghreb Meeting of the Conference on Sciences and Techniques of Automatic Control and Computer Engineering (MI-STA2023), 21-23 May, 2023, Benghazi, Libya.
- 62- **Ahmed Abougarair**, Majdeddin Ellafi, Omran Salih and Alfian Ma'Arif, Analysis of Mobile Accelerometer Sensor Movement Using Machine Learning Algorithms, 2023 IEEE 3rd International Maghreb Meeting of the Conference on Sciences and Techniques of Automatic Control and Computer Engineering (MI-STA2023), 21-23 May, 2023, Benghazi, Libya.
- 63- Ahmed Zrigan, **Ahmed Abougarair** and Mohamed Elmezughi, ADRC Robustness for Boiler Turbine Unit at Equilibrium Operation Point, 2023 IEEE 3rd International Maghreb Meeting of the Conference on Sciences and Techniques of Automatic Control and Computer Engineering (MI-STA2023), 21-23 May, 2023, Benghazi, Libya.
- 64- Maraam R. Al-Jurnazi, Adel Emhemmed and **Ahmed Abougarair**, Computer Model of Indoor Environment Signature for Sensing TWR Applications, 2023 IEEE 3rd International Maghreb Meeting of the Conference on Sciences and Techniques of Automatic Control and Computer Engineering (MI-STA2023), 21-23 May, 2023, Benghazi, Libya.

- 65- Mohammed Swedan, **Ahmed Abougarair**, and Adel Emhemmed, Stabilizing of Quadcopter Flight Model, 2023 IEEE 3rd International Maghreb Meeting of the Conference on Sciences and Techniques of Automatic Control and Computer Engineering (MI-STA2023), 21-23 May,2023, Benghazi, Libya.
- 66- Omran Salih, Mohamed K. Elmezughi, Shaheen Solwa, Ali Almaktoof and **Ahmed J. Abougarair**, An Overview of Skin Lesion Segmentation Methods: Techniques, Challenges, and Future Directions , 2023 IEEE 3rd International Maghreb Meeting of the Conference on Sciences and Techniques of Automatic Control and Computer Engineering (MI-STA2023), 21-23 May,2023, Benghazi, Libya.
- 67- Omran Salih, Mohamed K. Elmezughi, Shaheen Solwa, Ali Almaktoof and **Ahmed J. Abougarair**, FFT-Assisted U-Net Architecture for Improved Skin Lesion Segmentation , 2023 IEEE 3rd International Maghreb Meeting of the Conference on Sciences and Techniques of Automatic Control and Computer Engineering (MI-STA2023), 21-23 May,2023, Benghazi, Libya.
- 68- **Ahmed J Abougarair**, Mosab J. A. Abougarir, Hana Tarek Tilamon, Artificial pancreas control using optimized fuzzy logic based genetic algorithm, International Robotics & Automation, Vol. 9 , Issue 2 , 2023 Journal.
- 69- E. Alfian, Alfian Ma'arif, P. Chotikunnan and **Ahmed J. Abougarair**, Optimizing Light Intensity with PID Control, Control Systems and Optimization Letters, Vol. 1, No 3, 2023, ISSN: 2985-6116, DOI: 10.59247/csol.v1i3.38.
- 70- **Ahmed J. Abougarair** and Ifaw F. Buzkhar, Design and Implementation of Hydric Controller for Two Wheeled Robot, IJEIT on Engineering and Information Technology, vol.11 , no. 1, dec 2023.
- 71- Ahmed J. Abougarair and S. E Elwefati, Identification and Control of Epidemic Disease Based Neural Networks and Optimization Technique, International Journal of Robotics and Control Systems 3 (4),780-803., 2023.
- 72- Mohammed N. Aboud , **Ahmed J. Abougarair** and Adel S. Emhemmed, Robust H-Infinity Controller Synthesis Approach for Uncertainties System, 11th International Conference on Systems and Control (ICSC'2023), December 18-20, 2023, Sousse, Tunisia .
- 73- Afindra Hafiedz Akbar, **Ahmed J Abougarair** , Alfian Ma'arif, Chokri Rekik, , Atinkut Molla Mekonnen, Implementing PID Control on Arduino Uno for Air Temperature Optimization, Buletin Ilmiah Sarjana Teknik Elektro, Vol. 6, No 1, 2024.
- 74- **Ahmed J. Abougarair**, M. Alshaibi, Amany K. Alarbish, Mohammed Ali Qasem, Doaa AbdoOthman Qasem, Fursan Thabit, Ozgu Can, Blood Cells Cancer Detection Based on Deep Learning, Journal of Advances in Artificial Intelligence, Volume 2, Number 1, 2024. DOI: [10.18178/JAAI.2024.2.1.108-121](https://doi.org/10.18178/JAAI.2024.2.1.108-121)

- 75- **Ahmed J. Abougarair** and I. Attawil, Model Predictive Control for Achieving Lane, International Conference on Artificial Intelligence and its Applications in the Age of Digital Transformation, Springer conference, Nouakchott, Mauritania, 23-25April, 2024.
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