

Personal Information

Name: **Abdel-Nasser Sharkawy Ahmed Mahmoud, B.Sc. & M.Sc. & Ph.D.**

Scientific Name: **Abdel-Nasser Sharkawy**

Birth date: 29/9/1991

Place of birth: Nag Hammadi – Qena – Egypt.

Gender: Male

Marital status: Married and I have Son

Nationality: Egyptian

Military Status: Finished

Address: Mechanical Engineering Dept., Faculty of Engineering,
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Website : <https://scholar.google.gr/citations?user=cQxLMIoAAAAJ&hl=en&oi=ao>
https://www.researchgate.net/profile/Abdel_Nasser_Sharkawy

**Education**

September 2008 – June 2013 – Bachelor of Science (B.Sc.): Mechatronics Engineering, Mechanical Engineering Dept., Faculty of Engineering, South Valley University, Qena, Egypt.

Accumulative average grade “Very Good with honors or B+ (GPA: 3.67/4 With Credit Hour System) and I hold the first order on my faculty”, June 2013.

Thesis Title "Graduation Project": “Design and Implementation of 6-DOF Robot Arm”

Thesis Advisor: Prof. Ammar Mustafa Hassan

December 2013- April 2016 – Master of Science (M.Sc.): Mechatronics Engineering, Mechanical Engineering Dept., South Valley University, Qena, Egypt.

Thesis Title: Intelligent Control on Active Suspension System.

Thesis Advisor: Prof. Gamal Tag Abdel-Jaber & Prof. Ahmed Saad Ali & Prof. Nouby Mahdy Ghazaly

In Preliminary Courses: I had the first-class honor degree with GPA :3.83/4 or A- “Excellent”

September 2016- March 2020 – Doctor of Philosophy (Ph.D.): Robotics Group, Department of Mechanical Engineering and Aeronautics, University of Patras, Patras, Greece.

Thesis Title: Intelligent Control and Impedance Adjustment for Efficient Human-Robot Cooperation.

Thesis Advisor: Prof. Nikos Aspragathos

Grade: Excellent.

Faculty Academic Appointment

- September 2013–
May 2016** *Demonstrator (Teaching Assistant):* Mechatronics Engineering Division, Mechanical Engineering Department, Faculty of Engineering, South Valley University, Qena, Egypt.
- May 2016 –
September 2016** *Assistant Lecturer:* Mechatronics Engineering Division, Mechanical Engineering Department, Faculty of Engineering, South Valley University, Qena, Egypt.
- September 2016 –
March 2020** *PhD Student and Lab Instructor:* Robotics Group, Department of Mechanical Engineering and Aeronautics, University of Patras, Patras, Greece.
- 15 April 2021 –
30 November
2021** *Postdoctoral Researcher:* Humanoid and cognitive robotics group, Department of Cybernetics, Faculty of Electrical Engineering, Czech Technical University in Prague, Prague, Czech Republic.
- 29 June 2020 –
Present** *Lecturer (Assistant Professor):* Mechatronics Engineering Division, Mechanical Engineering Department, Faculty of Engineering, South Valley University, Qena, Egypt.
- 18 September
2022 – Present** *Assistant Professor:* Mechanical Engineering Department, College of Engineering, Fahad Bin Sultan University, Tabuk, Saudi Arabia.

Scholarships and Awards

- September 2016-
March 2020** Abdel-Nasser Sharkawy is funded by the “Egyptian Cultural Affairs & Missions Sector” and “Hellenic Ministry of Foreign Affairs Scholarship” for Ph.D. study in Greece.
- 2018** IROS Student and Developing Countries (SDC) Travel Award.
- 11-13 December
2021** *Young Egyptian Researcher Award* from 31st International Conference on Computer Theory and Applications (ICCTA 2021) organized by AASTMT, Alexandria, Egypt.

Teaching Experiences*Lecturer (Assistant Professor)*

- June 2020-
Present** [Mechanical Engineering Department, Faculty of Engineering, South Valley University, Qena, Egypt]
- Under-graduate courses:
 - Principles of Automatic Control
 - Theory of Machines and Mechanisms

- Measurements and Instrumentations
- Mechanics of Machines
- Engineering Mathematics
- Projects Management [For 4th year Electrical Engineering Department]

- PhD and M.Sc. courses:

- Robot Dynamics
- Advanced Control Theory and Its Applications I
- Advanced Analog Control

September 2022- Present [Mechanical Engineering Department, College of Engineering, Fahad Bin Sultan University, Tabuk, Saudi Arabia]

- Control Systems
- Engineering Materials

2020-2022 [Department of Medical Equipment Maintenance, Health Technical Institute, South Valley University, Qena, Egypt]

- Measuring Instruments

2022 [Faculty of Engineering, Al-Azhar University branch Qena, Qena, Egypt]

- Theory and Design of Machines

PhD Student /Assistant Professor / Lab Instructor

September 2016- March 2020 [Robotics Group, Department of Mechanical Engineering and Aeraunatics, University of Patras, Patras, Greece],

Giving labs of the following under-graduate courses:

- Class of Mechatronics
- Class of Electrical Design
- Class of Industrial Automation
- Class of Robotics

Teaching Assistant

September 2013- September 2016 [Mechanical Engineering Department, Faculty of Engineering, South Valley University, Qena, Egypt],

Giving exercises and labs of the following under-graduate courses:

- Engineering Mathematics
- Automatic Control principles
- Mechanics of Machines
- Hydraulic systems
- Machine Design
- Engineering Drawing
- Production Engineering

Professional and Community Service Experiences**August 2020-
November 2021**

Deputy Director of Quality Assurance and Accreditation Unit at Faculty of Engineering, South Valley University, Qena, Egypt.

January 2021

Participating with a team for certifying the supply and the installation of 3 cranes (10 tons) at the laboratories of Faculty of Engineering, South Valley University, Qena, Egypt.

**June 2020-
December 2020**

Secretary, Department of Mechanical Engineering, Faculty of Engineering, South Valley University, Qena, Egypt. My job was as follows:

- Supporting the head of the Department and writing the meeting Minutes.
- Organizing the agenda of discussions.
- Sending reminders and updates to other members.

August 2020

Participating with a team for preparing drawings, technical reviews and specifications, and documents for supplying and installing one elevator at Faculty of Al Alsun, South Valley University, Hurghada, Egypt.

June 2020

Participating with a team for preparing technical reviews, specifications, and documents for the replacement and renewal process of 2 elevators:

- The first elevator in the old central building, South Valley University, Qena, Egypt.
- The second elevator in Faculty of science, South Valley University, Qena, Egypt.

2020

Participating with a member from Electrical Engineering Department, to fix and maintain the electronic metal detector gate of Hathor Basma Hotel, Qena, Egypt.

**March 2014-
March 2015**

Air Defense Research and Development Centre during Military service:

- I worked as a member in a group on a robot project; The concern of the study was on design the mechanical parts of the robot and doing a programmable system for it. After implementing it, we made several tests to examine its efficiency.
- Designing Printed Circuit Board (PCB).
- Working on welding “Eye surveillance units” electronic board.

Interests and Activities

Mechanical Eng, Mechatronics and Robotics Eng

- Robotics
- Human-Robot Interaction
- Mechatronic Systems
- Robot Control
- Neural Networks and Machine Learning
- Rehabilitation
- Ergonomics
- Control and Automation

My Videos which illustrate some of my experiments with KUKA LWR IV robot are available at this link: <https://www.youtube.com/channel/UCpyIU6pMj9nLlonjekCfHYQ>

A student member of IEEE RAS (2018 & 2019)

Traveling

Taking care of family, friends, and others

Providing social counseling and guidance

Member of Editorial Board

- International Journal of Robotics and Control Systems (IJRCS) since 2022, [Section Editor], <https://pubs2.ascee.org/index.php/IJRCS/about/editorialTeam>.
- SVU-International Journal of Engineering Sciences and Applications (SVU-IJESA) since 2020, <https://svusrc.journals.ekb.eg/journal/editorial.board>.
- PriMera Scientific Engineering since 2022, <https://primerascientific.com/psen/editorialboard>.
- Indian Journal of Engineering since September 2018, https://www.discoveryjournals.org/engineering/Editorial_Board/index.htm.
- Journal of Advances in Applied & Computational Mathematics, 2020-2022.

Guest Editor

- Special Issue: Machine Learning Based Methods for Safety and Control of Human–Robot Interaction. Machines, MDPI, 2022. https://www.mdpi.com/journal/machines/special_issues/machine_learning_human_robot_interaction

Reviewer

Journals:

- IEEE Robotics and Automation Letters, 2022
- International Journal of Intelligent Robotics and Applications (JIRA), 2022
- Neural Networks, 2021, 2022
- Frontiers in Robotics and AI, 2021
- Intelligent Service Robotics, 2021

- IEEE Transactions on Control Systems Technology, 2021
- Journal of Control, Automation and Electrical Systems, 2021, 2022
- Australian Journal of Mechanical Engineering, 2021, 2022
- IEEE Transactions on Robotics, 2020, 2021
- IEEE Transactions on Industrial Electronics, 2020, 2021, 2022
- Precision Engineering, 2022
- Evaluation and Program Planning, 2022
- Sensors, MDPI, 2022
- Machines, MDPI, 2022
- Applied Sciences, MDPI, 2022
- Sustainability, MDPI, 2022
- Symmetry, MDPI, 2022
- Micromachines, MDPI, 2022
- Brain Sciences, MDPI, 2022
- Complexity, Hindawi, 2020
- SN Applied Sciences, 2020
- Robotics and Computer-Integrated Manufacturing, 2018/2019, 2021
- Mechatronics, 2018/2019, 2022
- Robotica, 2019, 2021, 2022
- Smart Learning Environments, 2022
- International Journal of Robotics and Control Systems (IJRCS), 2022
- International Journal of Mechanical Engineering and Robotics Research (IJMERR), 2020, 2021
- Journal of Advances in Applied & Computational Mathematics, 2020, 2021
- Academia Letters, 2022

Conferences:

- MED 2022
(The 30th Mediterranean Conference on Control and Automation)
- IROS 2019
(IEEE/RSJ International Conference on Intelligent Robots and Systems)
- CoDIT, 2018-present
(International Conference on Control, Decision and Information Technologies)
- RAAD 2018, 2021
(27th, 30th International Conference on Robotics in Alpe-Adria-Danube Region)
- ICEST, 2019
(International Conference on Engineering Science and Technology)
- MLIS2020
(The 2nd International Conference on Machine Learning and Intelligent Systems)
- ICAS 2020
(The Sixteenth International Conference on Autonomic and Autonomous Systems)

- IWoSR 2020
(2020 International Workshop on Service Robotics)
- JCRAI 2021
(2021 4th International Joint Conference on Robotics and Artificial Intelligence)
- ICICCT 2022
(7th International Conference on Information, Communication & Computing Technology)
- ISCKU 2021
(3rd International Scientific Conference of Alkafeel University)

>> See my profile on Publons: <https://publons.com/researcher/3661794/abdel-nasser-sharkawy/peer-review/> [**Excellent reviewer**]

IPC and Technical Program Committee

- ICEST, 2019
- (ICAS 2020 & 2021 & 2022). The Sixteenth & Seventeenth & Eighteenth International Conference on Autonomic and Autonomous Systems
- Automation, Robotics & Communications for Industry 4.0 (ARCI' 2021 and ARCI' 2022): 1st and 2nd IFSA Winter Conference
- 2020 & 2021 International Workshop on Service Robotics (IWoSR 2020 and IWoSR 2021)
- 2021 4th International Joint Conference on Robotics and Artificial Intelligence (JCRAI 2021)
- 2022 International Conference on Automation, Robotics and Computer Engineering (ICARCE 2022)
- 2022 2nd International Conference on Computer Application and Information Security (ICCAIS2022)

Summer Schools and Events

- 18-22 September 2017** Summer School on Singularities of Mechanisms and Robotic Manipulators, Johannes Kepler University Linz, Austria.
- 21-23 April 2016** Abdel-Nasser Sharkawy Participated in S3EDY STARTUP Conference to promote business leadership and development of small projects under the care of Integrated Technology Academy of Scientific Research and Technology Transfer Unit (ITTU) of Assuit University and Academy of Scientific Research and Technology, Upper Egypt development center, Karaman Island, Sohag, Egypt.

Languages

Mother Tongue: Arabic
Second Language: English (Fluent)
Basic of: French, and Greek

Honors and Prizes

- 2021** Scientific Publication Award from South Valley University
- 2020** Scientific Publication Award from South Valley University
- 2019** Scientific Publication Award from South Valley University
- 2018** Scientific Publication Award from South Valley University
- 2016** Scientific Publication Award from South Valley University
- 2011/2012** Certificate of Appreciation from South Valley University for having the first-class honor degree (B.Sc.) on Mechanical Engineering Dept. with GPA :3.87/4 or A-
- 2010/2011** Certificate of Appreciation from South Valley University for having the first-class honor degree (B.Sc.) on Mechanical Engineering Dept. with GPA :3.65/4 or B+
- 2008/2009** Certificate of Appreciation from South Valley University for having the second-class honor degree (B.Sc.) on faculty of Engineering with GPA :3.48/4 or B+
- 28 May 2010** Certificate of Achievement from Canadian Training Center of Human Development "CTCHD" after completing a comprehensive seminar in "Skills of Success".

Computer Languages and skills*Computer language and Skills*

- Proficient user of MATLAB program, and C++ (In my B.Sc., M.Sc., and Ph.D., I implemented many codes).
- ***Programming of KUKA LWR IV robot.***
- Good knowledge in Visual basic programming.
- Good Knowledge in Solid Work and Power Shape.
- AutoCAD.
- ICDL, Microsoft Office and Computer Maintenance

Interpersonal Skills

- Very good skills in scientific research.
- Learn from mistakes and change behavior as a result of what is learnt.
- Ability to work well under pressure.
- Ability to learn new tasks quickly.
- Good communication and negotiation skills.
- Flexible, motivated, committed to teamwork, hard worker & punctual.

Training

During B.Sc. Duration (2008-2013):

July 2010 (2 weeks)	The Aluminum Company of Egypt with grade "Excellent".
August 2011 (2 weeks)	The Aluminum Company of Egypt with grade "Excellent".
July 2012 (2 weeks)	The Aluminum Company of Egypt with grade "Excellent".
24 July 2011- 11 August 2011	Nag-Hammadi 500 kV Substation with grade "Excellent".
25 June 2011- 7 July 2011	JELECOM Company for completing training course "PLC Applications Basic Training" with grade "Excellent".
23 June 2012- 5 July 2012	JELECOM Company for completing training course "Microchip Microcontroller Applications Basic Training" with grade "Excellent".
September 2010 (2 weeks)	Qena Vocational Training for completing "Refrigeration and Conditioning training".
September 2011 (1 week)	Qena Vocational Training for completing "Three-phase motor winding training"
August 2010 (1 month)	British Center "B.C.A.C" for completing "ICDL (English) training".
February 2010 (2 weeks)	British Center "B.C.A.C" for completing "Visual Basic training" with grade "very good".

From Teaching Assistant Duration (2013) to Present:

25 September 2013- 2 October 2013	JELECOM Company for completing training course "AutoCAD 2D Basic application" with grade "Excellent".
(5-7 May 2015 & 3-4 June 2020)	Workshop on Credit hours and their application performance at Faculty and Leadership Development Center (FLDC), South Valley University.
(9-11 May 2015 & 20-21 May 2020)	Workshop on Competitive research projects at (FLDC), South Valley University.
12-14 May 2015	Workshop on Communication skills in different education methods and Training on Graphics Program "Adobe Photoshop" at (FLDC), South Valley University.
19-21 May 2015	Workshop on university management at (FLDC), South Valley University.
6-16 June 2015	Workshop on university teacher preparation at Faculty of Education, South Valley University.
6-7 June 2020	Workshop on Strategic Planning at (FLDC), South Valley University.
27 May 2020- 1 June 2020	Fundamentals of Digital Transformation: Operating System (Grade: 100%), Word Processing (Grade: 100%), and Presentations (Grade: 96%) from CUTCS Training Center, South Valley University.

Theses under Supervision and Co-Supervision*B.Sc. and Diploma*

1. George Pagounis, Control of robotic arm with the use of EMG (Έλεγχος ρομποτικού βραχίονα με χρήση ηλεκτρομυογραφημάτων), Diploma Thesis, Department of Mechanical Engineering and Aeronautics, University of Patras, Patras, Greece, completed 2019.
2. Design, Implementation, and Control of a Robotic Arm for Manipulation Tasks, B.Sc. Project (Undergraduate Students), Mechanical Engineering Department, Faculty of Engineering, South Valley University, Qena, Egypt, Completed, July 2021.
3. Development of Elevator Control System for Laboratories of Faculty of Engineering, South Valley University, B.Sc. Project (Undergraduate Students), Mechanical Engineering Department, Faculty of Engineering, South Valley University, Qena, Egypt, Completed, June 2022. A video is available here: <https://youtu.be/H5TCJJK7vJo>.

M.Sc.

1. Mohamed Ahmed Mahmoud Dardeer, Intelligent Control Design for Dynamic Vibration Absorption, M.Sc. Thesis, Mechanical Engineering Department, Faculty of Engineering, South Valley University, Qena, Egypt, on-going (2020).
2. Shady Ashraf Abdelfattah, A Study of Different Control Methods for Anti-lock Brake System, M.Sc. Thesis, Mechanical Engineering Department, Faculty of Engineering, South Valley University, Qena, Egypt, on-going (2020).

Publications*Journal Papers*

1. [Abdel-Nasser Sharkawy](#), Panagiotis N. Koustoumpardis, “Human–Robot Interaction: A Review and Analysis on Variable Admittance Control, Safety, and Perspectives”, *Machines*, Vol. 10, No. 7, 591, pp. 1-24, July 2022. (IF: 2.899, CiteScore: 3.1, Q2). Doi: <https://doi.org/10.3390/machines10070591>
2. [Abdel-Nasser Sharkawy](#), and Mustafa M. Ali., “NARX Neural Network for Safe Human–Robot Collaboration Using Only Joint Position Sensor”, *Logistics*, Vol. 6, No. 4: 75, pp. 1-16, October 2022. (INDEXED: ESCI (Web of Science)). Doi: <https://doi.org/10.3390/logistics6040075>
3. [Abdel-Nasser Sharkawy](#), Mahmoud Hasanin, Mohamed Sharf, Mahmoud Mohamed, and Ahmed Elsheikh, “Development of Smart Home Applications Based on Arduino and Android Platforms: An Experimental Work”, *Automation*, Vol. 3, No. 4, pp. 579-595, October 2022. Doi: <https://doi.org/10.3390/automation3040029>
4. [Abdel-Nasser Sharkawy](#), “Forward and inverse kinematics solution of a robotic manipulator using a multilayer feedforward neural network”, *Journal of Mechanical and Energy Engineering*, Vol. 6(46), No. 2, pp. 1-17, December 2022, Doi: <https://doi.org/10.30464/jmee.00300>
5. Shawkat Sabah Khairullah, [Abdel-Nasser Sharkawy](#), “Design and Implementation of a Reliable and Secure Controller for Smart Home Applications Based on PLC”, *Journal of Robotics and Control (JRC)*, Vol. 3, No. 5, pp. 614-621, September 2022. (INDEXED: SCOPUS, CiteScore: 3.7, Q3). Doi: <http://dx.doi.org/10.18196/jrc.v3i5.15972>
6. [Abdel-Nasser Sharkawy](#), Mustafa M. Ali, Hossam H. H. Mousa, Ahmed S. Ali, G. T. Abdel-Jaber, “Short-Term Solar PV Power Generation Day-Ahead Forecasting Using Artificial Neural Network: Assessment and Validation”, *International Journal of Robotics and Control Systems*, Vol. 2, No. 3, 2022, pp. 562-580, September 2022. Doi: <https://doi.org/10.31763/ijrcs.v2i3.780>

7. [Abdel-Nasser Sharkawy](#), Mustafa M. Ali, Hossam H. H. Mousa, Ahmed S. Ali, G. T. Abdel-Jaber, "Machine Learning Method for Solar PV Output Power Prediction", SVU-International Journal of Engineering Sciences and Applications, Vol. 3, No. 2, pp. 123-130, December 2022. Doi: <http://dx.doi.org/10.21608/svusrc.2022.157039.1066>
8. [Abdel-Nasser Sharkawy](#), Gamal T. Abdel-Jaber, "Design and Implementation of a Prototype of Elevator Control System: Experimental Work", SVU-International Journal of Engineering Sciences and Applications, Vol. 3, No. 2, pp. 80-86, December 2022. Doi: <https://dx.doi.org/10.21608/svusrc.2022.149091.1057>
9. [Abdel-Nasser Sharkawy](#), "Neural Networks for Robot Collision Estimation and Detection", PriMera Scientific Engineering, Vol. 1, No. 1, pp. 12-15, September 2022. Doi: <https://dx.doi.org/10.2139/ssrn.4206497>
<https://primerascientific.com/pdf/psen/PSEN-01-003.pdf>
10. [Abdel-Nasser Sharkawy](#), "Effect of Joints' Configuration Change on the Effective Mass of the Robot", International Journal of Robotics and Control Systems (IJRCS), Vol. 2, No. 1, pp. 105-114, 18 February 2022. DOI: <https://doi.org/10.31763/ijrcs.v2i1.564>
11. [Abdel-Nasser Sharkawy](#), "An Investigation on the Effective Mass of the Robot: Dependence on the End-Effector Position", Engineering Transactions, Vol. 69, No. 3, pp. 293-313, Published online: August 26, 2021. (INDEXED: SCOPUS & Q3). DOI: <https://dx.doi.org/10.24423/EngTrans.1329.20210826>
12. [Abdel-Nasser Sharkawy](#), Ahmed A. Mostfa, "Neural Networks' Design and Training for Safe Human-Robot Cooperation", Journal of King Saud University - Engineering Sciences, Published online: February 2021. (INDEXED: SCOPUS & Q1). Doi: <https://doi.org/10.1016/j.jksues.2021.02.004>
13. [Abdel-Nasser Sharkawy](#), "A Survey on Applications of Human-Robot Interaction", Sensors & Transducers, Vol. 251, Issue 4, pp. 19-27, April 2021. https://www.sensorsportal.com/HTML/DIGEST/P_3221.htm.
14. [Abdel-Nasser Sharkawy](#), Panagiotis N. Koustoumpardis, Nikos Aspragathos, "A Recurrent Neural Network for Variable Admittance Control in Human-Robot Cooperation: Simultaneously and online Adjustment of the Virtual Damping and Inertia parameters", International Journal of Intelligent Robotics and Applications, Vol. 4, No. 4, pp. 441 - 464, Published online: November 2020. (INDEXED: Web of Science and SCOPUS). Doi: <https://doi.org/10.1007/s41315-020-00154-z>
15. [Abdel-Nasser Sharkawy](#), Panagiotis N. Koustoumpardis, Nikos Aspragathos, "A Neural Network based Approach for Variable Admittance Control in Human-Robot Cooperation: Online Adjustment of the Virtual Inertia", Intelligent Service Robotics, Vol. 13, No. 2, pp. 495 - 519, Published online: August 2020. (IF: 1.547). Doi: <https://doi.org/10.1007/s11370-020-00337-4>
16. [Abdel-Nasser Sharkawy](#), Charalampos Papakonstantinou, Vassilis Papapostopoulos, Vassilis C. Moulitanitis, and Nikos Aspragathos, "Task Location for High Performance Human-Robot Collaboration", Journal of Intelligent & Robotic Systems, Vol. 100, No. 1, pp. 183-202, Published online: March 2020. (IF: 2.259). Doi: <https://doi.org/10.1007/s10846-020-01181-5>
17. [Abdel-Nasser Sharkawy](#), Panagiotis N. Koustoumpardis, Nikos Aspragathos, "Human-Robot Collisions Detection for Safe Human-Robot Interaction Using One Multi Input-Output Neural Network", Soft Computing, Vol. 24, pp. 6687-6719, 2020. (IF: 3.050). Doi: <https://doi.org/10.1007/s00500-019-04306-7>
18. [Abdel-Nasser Sharkawy](#), Panagiotis N. Koustoumpardis, Nikos Aspragathos, "Neural Network Design for Manipulator Collision Detection Based Only on the Joint Position

- Sensors”, ROBOTICA, Vol. 38, Special Issue 10: Human–Robot Interaction (HRI), pp. 1737 – 1755, Published online: June 2019. (IF: 1.509).
Doi: <https://doi.org/10.1017/S0263574719000985>
19. [Abdel-Nasser Sharkawy](#) and Nikos Aspragathos, "Human-Robot Collision Detection Based on Neural Networks," International Journal of Mechanical Engineering and Robotics Research, Vol. 7, No. 2, pp. 150- 157, March 2018. (INDEXED: SCOPUS & CNKI & Q3). Doi: <http://dx.doi.org/10.18178/ijmerr.7.2.150-157>
 20. [Abdel-Nasser Sharkawy](#), Panagiotis N. Koustoumpardis, “Dynamics and Computed-Torque Control of a 2-DOF manipulator: Mathematical Analysis”, International Journal of Advanced Science and Technology, Vol. 28, No. 12, pp. 201-212, December 2019. (INDEXED: SCOPUS, Q3). <http://serisc.org/journals/index.php/IJAST/article/view/1212>
 21. [Abdel-Nasser Sharkawy](#), “Principle of Neural Network and Its Main Types: Review”, Journal of Advances in Applied & Computational Mathematics, Vol. 7, pp. 8-19, 2020. Doi: <https://doi.org/10.15377/2409-5761.2020.07.2>.
 22. Nouby M. Ghazaly, [Abd El-Nasser S. Ahmed](#), Ahmed S. Ali, G. T. Abd el- Jaber, “H ∞ Control of Active Suspension System for a Quarter Car Model”, International Journal of Vehicle Structures & Systems (ijvss), ISSN: 0975-3060 (Print), 0975-3540 (Online), Volume 8, Issue 1, pp. 35-40, 2016. (INDEXED: SCOPUS & Q3). Doi: <https://doi.org/10.4273/ijvss.8.1.07>
 23. Ahmed A. Mostfa, Fedaa Noel Abdulahad, [Abdel-Nasser Sharkawy](#), “AndroidTrack: An Investigation of Using Social Networks’ Applications in Android Platforms”, Iraqi Journal of Science, Vol. 62, No. 7, pp. 2445-2453, 2021. (INDEXED: SCOPUS & Q4). DOI: <https://doi.org/10.24996/ijss.2021.62.7.33>.
 24. Ahmed A. Mostfa, Aya A. Alabass, [Abdel-Nasser Sharkawy](#), “Nineveh Blood: Android Based Blood Donation Application for Nineveh Governorate in Iraq”, AL-Rafidain Journal of Computer Sciences and Mathematics, Vol. 14, No. 2, pp. 85-96, 2020. Doi: [10.33899/csmj.2020.167341](https://doi.org/10.33899/csmj.2020.167341).
 25. Shady Ashraf Abd El-Fatah, [Abdel-Nasser Sharkawy](#), Ahmad O. Moaaz, Nouby M. Ghazaly, “A Comparative Study of Different Control Methods for Anti-Lock Braking System (ABS)”, SVU-International Journal of Engineering Sciences and Applications, Vol. 2, No. 1, pp. 27-34, June 2021. Doi: <https://dx.doi.org/10.21608/svusrc.2021.65855.1007>
 26. [Abd El-Nasser S. Ahmed](#), Ahmed S. Ali, Nouby M. Ghazaly, G. T. Abd el- Jaber, “PID Controller of Active Suspension System for a Quarter Car Model”, International Journal of Advances in Engineering & Technology (IJAET), ISSN: 2231-1963, Volume 8, Issue 6, pp. 899-909, December 2015. <https://www.ijaet.org/media/3I30-IJAET0830236-v8-iss6-pp899-909.pdf>

Book Chapter

1. [Abdel-Nasser Sharkawy](#), Panagiotis N. Koustoumpardis, Nikos Aspragathos, “Manipulator Collision Detection and Collided Link Identification based on Neural Networks”, In: Aspragathos N., Koustoumpardis P., Moulitanitis V. (eds) Advances in Service and Industrial Robotics. RAAD 2018. Mechanisms and Machine Science, vol 67. Springer, Cham. (INDEXED: Web of Science & SCOPUS). Doi: https://doi.org/10.1007/978-3-030-00232-9_1
2. [Abdel-Nasser Sharkawy](#), “Minimum Jerk Trajectory Generation for Straight and Curved Movements: Mathematical Analysis”, In: S. Y. Yurish (Editor) Advances in Robotics

and Automatic Control: Reviews, Vol. 2, pp. 187-201, IFSA Publishing, S. L., February 2021. (INDEXED: Web of Science). Doi: <https://doi.org/10.48550/arXiv.2102.07459>
https://www.sensorsportal.com/HTML/BOOKSTORE/Advances_in_Robotics_Reviews_Vol_2.pdf

Conference Papers

1. [Abdel-Nasser Sharkawy](#), “Sub-Optimal Configuration for Human and Robot in Co-Manipulation Tasks Based on Inverse Condition Number”, 2021 31st International Conference on Computer Theory and Applications (ICCTA), Alexandria, Egypt, 11-13 December 2021. (INDEXED: SCOPUS).
Doi: <https://doi.org/10.1109/ICCTA54562.2021.9916607>
2. [Abdel-Nasser Sharkawy](#), “Human-Robot Interaction: Applications”, Automation, Robotics & Communications for Industry 4.0 (ARCI' 2021): 1st IFSA Winter Conference, CHAMONIX-MONT-BLANC, FRANCE, 3-5 February 2021. (INDEXED: Clarivate Analytics (former Thomson Reuters)). **Keynote Speaker**
Doi: <https://doi.org/10.48550/arXiv.2102.00928>
https://www.sensorsportal.com/ARCI/ARCI_2021_Proceedings.pdf#page=98
3. [Abdel-Nasser Sharkawy](#), Panagiotis N. Koustoumpardis, Nikos Aspragathos, “Variable Admittance Control for Human-Robot Collaboration based on Online Neural Network Training”, 2018 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2018), 2018. (Very high-ranking conference in robotics). (INDEXED: Web of Science & SCOPUS). Doi: <https://doi.org/10.1109/IROS.2018.8593526>
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DECLARATION:

I hereby declare that all the information given above about me is true to the best of my knowledge. Date: October 20, 2022.



(Abdel-Nasser Sharkawy)

More information: