#### Personal Information

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

Scientific Name: Abdel-Nasser Sharkawy

Birth date: 29/09/1991

**Place of birth:** Nag Hammadi – Qena – Egypt.

Gender: Male

Marital status: Married and I have Son and Daughter.

**Nationality:** Egyptian

Military Status: Finished in 2015

Address: Mechanical Engineering Dept., Faculty of Engineering,

South Valley University, Qena 83523, Egypt.

Phone: +20-1001689823 / +966544736334

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abdelnassersharkawy@eng.svu.edu.eg

abdelnassersharkawy@eng.svu.edu amahmoud@upatras.gr

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–	Demonstra	tor (Teaching	g Assistant):	Mechatronics	Engineer	ring
<b>May 2016</b>	Division,	Mechanical	Engineering	Department,	Faculty	of
	Engineerin	g, South Valle	y University, Ç	ena, Egypt.		

<b>May 2016</b> –	Assistant Lecturer: Mechatronics Engineering Division, Mechanical
September 2016	Engineering Department, Faculty of Engineering, South Valley
	University, Qena, Egypt.

September 2016 –	PhD Student and Lab Instructor: Robotics Group, Department of
<b>March 2020</b>	Mechanical Engineering and Aeronautics, University of Patras,
	Patras, Greece.

15 April 2021 –	Postdoctoral Researcher: Humanoid and cognitive robotics group,
30 November	Department of Cybernetics, Faculty of Electrical Engineering, Czech
2021	Technical University in Prague, Prague, Czech Republic.

29 June 2020 –	Lecturer (Assistant Professor): Mechatronics Engineering Division,
Present	Mechanical Engineering Department, Faculty of Engineering, South
	Valley University, Qena, Egypt.

18 September	Assistant Professor: Mechanical Engineering Department, College
<b>2022 – Present</b>	of Engineering, Fahad Bin Sultan University, Tabuk, Saudi Arabia.

# Scholarships and Awards

September 2016-	Abdel-Nasser Sharkawy is funded by the "Egyptian Cultural Affairs
March 2020	& 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	Young	Egyptian	Researcher	Award	from	31st	International
2021	Confere	nce on Co	mputer Theo	ry and A	pplicat	ions (l	CCTA 2021)
	organize	ed by AAS'	TMT, Alexano	dria, Egy <sub>l</sub>	ot.		

# **Teaching Experiences**

## Lecturer (Assistant Professor)

June 2020-[Mechanical Engineering Department, Faculty of Engineering, South **Present** 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 4<sup>th</sup> 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]

- > Introduction to Mechatronics
- ➤ Introduction to Robotics
- > Mechatronics System Design
- > Electrical Circuits and Machines
- Control Systems
- Control Systems Lab
- > Instrumentation and Measurements
- > Instrumentation and Measurements Lab
- Manufacturing Processes I
- > Engineering Materials
- > Engineering Materials Lab
- Final Year Project (1)
- Final Year Project (2)

#### 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**

Participating in developing the study plan for the bachelor's degree in Mechatronics and Robotics Engineering, College of Engineering, Fahad Bin Sultan University, Tabuk, Saudi Arabia.

Developing the B.Sc. Program of Mechatronics Engineering as a part of the Unified Regulations for Bachelor Programs with Credit Hours System of Faculty of Engineering, South Valley University, Qena, Egypt.

## March 2022-September 2022

Representative of Faculty of Engineering in the laboratories' unit at South Valley university, Qena, Egypt.

## 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 in South Valley University, 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: <a href="https://www.youtube.com/channel/UCpyIU6pMj9nLIonjekCfHYQ">https://www.youtube.com/channel/UCpyIU6pMj9nLIonjekCfHYQ</a>

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], <a href="https://pubs2.ascee.org/index.php/IJRCS/about/editorialTeam">https://pubs2.ascee.org/index.php/IJRCS/about/editorialTeam</a>

- Control Systems and Optimization Letters, since 2023, https://ejournal.csol.or.id/index.php/csol/about/editorialTeam
- Journal of Fuzzy Systems and Control, since 2023, https://ejournal.ptti.web.id/index.php/jfsc/about/editorialTeam
- Jurnal Ilmiah Teknik Elektro Komputer dan Informatika, since 2024, http://journal.uad.ac.id/index.php/JITEKI/about/editorialTeam
- SVU-International Journal of Engineering Sciences and Applications (SVU-IJESA), since 2020, <a href="https://svusrc.journals.ekb.eg/journal/editorial.board">https://svusrc.journals.ekb.eg/journal/editorial.board</a>
- 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.
 <a href="https://www.mdpi.com/journal/machines/special\_issues/machine\_learning\_huma">https://www.mdpi.com/journal/machines/special\_issues/machine\_learning\_huma</a>
 n robot interaction

#### Reviewer

### Journals:

- Scientific Reports, 2023
- IEEE Robotics and Automation Letters, 2022
- IEEE Transactions on Mechatronics, 2023
- IEEE Access, 2023
- IEEE Transactions on Reliability, 2023-present
- Control Engineering Practice, 2023
- International Journal of Intelligent Robotics and Applications (JIRA), 2022, 2023
- Neural Networks, 2021-present
- 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-present
- Australian Journal of Mechanical Engineering, 2021, 2022
- IEEE Transactions on Robotics, 2020, 2021
- IEEE Transactions on Industrial Electronics, 2020-present
- Precision Engineering, 2022
- Evaluation and Program Planning, 2022, 2023
- Robotics, MDPI, 2023-Present
- Sensors, MDPI, 2022, 2023
- Machines, MDPI, 2022, 2023
- Automation, MDPI, 2024

- Big Data and Cognitive Computing, MDPI, 2024
- Designs, MDPI, 2024
- World Electric Vehicle Journal, MDPI, 2023-present
- Applied Sciences, MDPI, 2022-Present
- Journal of Sensor and Actuator Networks (JSAN), MDPI, 2023-present
- Journal of Marine Science and Engineering, MDPI, 2024
- Sustainability, MDPI, 2022
- Symmetry, MDPI, 2022-present
- Micromachines, MDPI, 2022
- Biomimetics, MDPI, 2024
- Brain Sciences, MDPI, 2022-present
- Knowledge, MDPI, 2024
- Complexity, Hindawi, 2020
- SN Applied Sciences, 2020
- Robotics and Computer-Integrated Manufacturing, 2018/2019, 2021
- Mechatronics, 2018/2019, 2022
- Robotica, 2019-present
- Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2024
- Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2022-present
- Electronics Journal, https://els-journal.net/, 2023
- Smart Learning Environments, 2022
- SVU-International Journal of Engineering Sciences and Applications, 2022-present
- International Journal of Robotics and Control Systems (IJRCS), 2022, 2023
- International Journal of Mechanical Engineering and Robotics Research (IJMERR), 2020, 2021
- Journal of Advances in Applied & Computational Mathematics, 2020, 2021
- Academia Letters, 2022

## Conferences:

- ARCI' 2023 & 2024
  - (3rd & 4th IFSA Winter Conference on Automation, Robotics & Communications for Industry 4.0/5.0)
- MED 2022 & 2023
  - (The 30th & 31st Mediterranean Conference on Control and Automation)
- IROS 2019, 2023
  - (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 Web of Science: [Excellent reviewer] https://www.webofscience.com/wos/author/record/AAP-1972-2020

## 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**

November 2023 Students team under my supervision participated in the 7Th IET GCC Robotics Challenge, Saudi Local Round, Effat University, Jeddah. The

team achieved the 4<sup>th</sup> order.

18-22 September Summer School on Singularities of Mechanisms and Robotic Manipulators,Johannes Kepler University Linz, Austria.

### 21-23 April 2016

Abdel-Nasser Sharkawy Participated in <u>S3EDY STARTUP Conference</u> 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**

2023	Scientific Publication Award from South Valley University
2022	Scientific Publication Award from South Valley University
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 honors 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 honors degree (B.Sc.) on Mechanical Engineering Dept. with GPA :3.65/4 or B+ $$
2008/2009	Certificate of Appreciation from South Valley University for having the second-class honors degree (B.Sc.) on faculty of Engineering with GPA :3.48/4 or B+ $$
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
                   The Aluminum Company of Egypt with grade "Excellent".
    (2 weeks)
  August 2011
                   The Aluminum Company of Egypt with grade "Excellent".
    (2 weeks)
                   The Aluminum Company of Egypt with grade "Excellent".
    July 2012
    (2 weeks)
  24 July 2011-
                   Nag-Hammadi 500 kV Substation with grade "Excellent".
  11 August 2011
  25 June 2011-
                   JELECOM Company for completing training course "PLC Applications
                   Basic Training" with grade "Excellent", Assiut, Egypt.
   7 July 2011
  23 June 2012-
                   JELECOM Company for completing training course "Microchip
                   Microcontroller Applications Basic Training" with grade "Excellent".
   5 July 2012
September 2010
                   Qena Vocational Training for completing "Refrigeration and Conditioning
                   training".
    (2 weeks)
                   Qena Vocational Training for completing "Three-phase motor winding
September 2011
                   training".
    (1 week)
   August 2010
                   British Center "B.C.A.C" for completing "ICDL (English) training".
    (1 month)
  February 2010
                   British Center "B.C.A.C" for completing "Visual Basic training" with
    (2 weeks)
                   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 & 11-12 July 2023	Workshop on Credit hours and their application performance at Faculty and Leadership Development Center (FLDC), South Valley University, Qena, Egypt.
9-11 May 2015 & 20-21 May 2020	Workshop on Competitive research projects at (FLDC), South Valley University, Qena, Egypt.

12-14 May 2015 & 21-22 June 2023	Workshop on Communication skills in different education methods and Training on Graphics Program "Adobe Photoshop" at (FLDC), South Valley University, Qena, Egypt.
19-21 May 2015 & 8-9 June 2023	Workshop on University management at (FLDC), South Valley University, Qena, Egypt.
6-16 June 2015	Workshop on university teacher preparation at Faculty of Education, South Valley University, Qena, Egypt.
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.
2-3 August 2023	Workshop on Organizing Scientific Conferences at (FLDC), South Valley University, Qena, Egypt.

## 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: <a href="https://youtu.be/H5TCJJk7vJo">https://youtu.be/H5TCJJk7vJo</a>.
- 4. Hybrid Wind/PV-Thermal Renewable Energy System, Department of Mechanical Engineering, College of Engineering, Fahad Bin Sultan University, Tabuk, Saudi Arabia, Completed December 2022.
- 5. Development of An Intelligent Elevator Programmed using Arduino Unit, Department of Mechanical Engineering, College of Engineering, Fahad Bin Sultan University, Tabuk, Saudi Arabia, Completed May 2023.
- 6. Manufacture of a Robotic Arm of 4-Degrees of Freedom for the Development of Industrial Services, Department of Mechanical Engineering, College of Engineering, Fahad Bin Sultan University, Tabuk, Saudi Arabia, Completed May 2023.
- Development of Intelligent Automatic gate, Department of Mechanical Engineering, College of Engineering, Fahad Bin Sultan University, Tabuk, Saudi Arabia, <u>Completed May 2024</u>.

## 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.
- 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.

#### Ph.D.

 Khaled Hamed Mahmoud Abu Elainin, DESIGN OF DIFFERENT SAFETY TECHNIQUES FOR ROBOTIC SYSTEMS, Ph.D. Thesis, Mechanical Engineering Department, Faculty of Engineering, South Valley University, Qena, Egypt, <u>Completed June 2024</u>.

## **Publications**

# Journal Papers

- Abdel-Nasser Sharkawy, Asmaa G. Ameen, Shuaiby Mohamed, Gamal T. Abdel-Jaber, and I. Hamdan, "Design, Assessment, and Modeling of Multi-Input Single-Output Neural Network Types for the Output Power Estimation in Wind Turbine Farms", Automation, Vol. 5, No. 2, pp. 190-212, June 2024.
  - Doi: https://doi.org/10.3390/automation5020012
- 2. <u>Abdel-Nasser Sharkawy</u> and Jamal Mahmoud Nazzal, "Design and Manufacturing Using 3D Printing Technology of A 5-DOF Manipulator for Industrial Tasks", International Journal of Robotics and Control Systems, Vol. 4, No. 2, pp. 893-909. June 2024. Doi: https://doi.org/10.31763/ijrcs.v4i2.1456
- 3. Khaled H. Mahmoud, G. T. Abdel-Jaber, and <u>Abdel-Nasser Sharkawy</u>, "Neural Network-Based Classifier for Collision Classification and Identification for a 3-DOF Industrial Robot", Automation, Vol. 5, No. 1, pp. 13-34, March 2024. Doi: https://doi.org/10.3390/automation5010002
- Abdel-Nasser Sharkawy, Alfian Ma'arif, Furizal, Ravi Sekhar, and Pritesh Shah, "A
  Comprehensive Pattern Recognition Neural Network for Collision Classification Using
  Force Sensor Signals", Robotics, Vol. 12, No. 5, 124, pp. 1-22, 2023. Doi:
  https://doi.org/10.3390/robotics12050124
- 5. Ahmed A. Mostfa, Dhafer Sabah Yaseen, <u>Abdel-Nasser Sharkawy</u>, "A Systematic Review of the Event-Driven Activities in Social Applications", SVU-International Journal of Engineering Sciences and Applications, Vol. 4, No. 2, pp. 225-233, December 2023. Doi: https://doi.org/10.21608/syusrc.2023.208893.1122
- 6. Kouidri Ikram, Kaidameur Djilali, Dahmani Abdennasser, Raheem Al-Sabur, Benyekhlef Ahmed, <u>Abdel-Nasser Sharkawy</u>, "Comparative analysis of fouling resistance prediction in shell and tube heat exchangers using advanced machine learning techniques", Research on Engineering Structures and Materials (RESM), Vol. 10, No. 1, pp. 253-270, Online First: October 2023.
  - Doi: http://dx.doi.org/10.17515/resm2023.858en0816
- Abdel-Nasser Sharkawy, "Task Location to Improve Human–Robot Cooperation: A Condition Number-Based Approach", Automation, Vol. 4, No. 3, pp. 263–290, September 2023. Doi: https://doi.org/10.3390/automation4030016
- Abdel-Nasser Sharkawy, Mustafa M. Ali, Hossam H. H. Mousa, Ahmed S. Ali, Gamal T. Abdel-Jaber, Hany S. Hussein, Mohammed Farrag, and M. A. Ismeil, "Solar PV Power Estimation and Upscaling Forecast Using Different Artificial Neural Networks Types: Assessment, Validation, and Comparison", in IEEE Access, Vol. 11, pp. 19279-19300, 2023. Doi: https://doi.org/10.1109/ACCESS.2023.3249108
- 9. Dimas Dwika Saputra, Alfian Ma'arif, Hari Maghfiroh, Muhammad Ahmad Baballe, Angelo Marcelo Tusset, <u>Abdel-Nasser Sharkawy</u>, and Rania Majdoubi, "Performance Evaluation of Sliding Mode Control (SMC) for DC Motor Speed Control", Jurnal Ilmiah Teknik Elektro Komputer dan Informatika (JITEKI), Vol. 9, No. 2, pp. 502-510, 12 July 2023. Doi: http://dx.doi.org/10.26555/jiteki.v9i2.26291

- Fiki Listyantoro, Alfian Ma'arif, <u>Abdel-Nasser Sharkawy</u>, and Hamzah M. Marhoon, "DC to AC Inverter Prototype for Small Scale Power Supply with SPWM Method", Control Systems and Optimization Letters [Online], Vol. 1, No. 2, pp. 86-92, 18 June 2023. Doi: https://doi.org/10.59247/csol.v1i2.24
- 11. Haryo Setiawan, Alfian Ma'arif, Hamzah M Marhoon, <u>Abdel-Nasser Sharkawy</u>, Abdullah Çakan, "Distance Estimation on Ultrasonic Sensor Using Kalman Filter", Buletin Ilmiah Sarjana Teknik Elektro, Vol. 5, No. 2, pp. 210–217, May 2023. Doi: <a href="https://doi.org/10.12928/biste.v5i2.8089">https://doi.org/10.12928/biste.v5i2.8089</a>
- 12. Wahyu Latri Prasetya, Alfian Ma'arif, Hamzah M Marhoon, Reza Alayi, and <u>Abdel-Nasser Sharkawy</u>, "Monitoring of Water Flow on Solar-Powered Pump for IoT-Based Agriculture", Journal of Science in Agrotechnology, Vol. 1, No. 1, pp. 23-35, 14 May 2023. Doi: https://doi.org/10.21107/jsa.v1i1.6
- 13. Khaled H. Mahmoud, <u>Abdel-Nasser Sharkawy</u>, and G. T. Abdel-Jaber, "Development of safety method for a 3-DOF industrial robot based on recurrent neural network", Journal of Engineering and Applied Science, Vol. 70, Article No. 44, pp. 1-20, 13 May 2023. Doi: https://doi.org/10.1186/s44147-023-00214-8
- 14. <u>Abdel-Nasser Sharkawy</u>, Shawkat Sabah Khairullah, "Forward and Inverse Kinematics Solution of A 3-DOF Articulated Robotic Manipulator Using Artificial Neural Network", International Journal of Robotics and Control Systems, Vol. 3, No. 2, pp. 330-353, 9 May 2023. Doi: https://doi.org/10.31763/ijrcs.v3i2.1017
- 15. <u>Abdel-Nasser Sharkawy</u>, "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
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I hereby declare that all the information given above about me is true to the best of my knowledge. Date: September 10, 2024.

(Abdel-Nasser Sharkawy)