

Dr Ata Jahangir Moshayedi

BSc (Hons), MSC, PhD

Electronic Science in the Field Robotic(Mobile Olfaction)

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AWARDS

2025	China College Students Computer Design Competition 中国大学生计算机设计大赛。 Project Title: VSleep-睡眠姿势检测工具, Rank: 3 rd place in Jiangxi Province Azad University, Iran (Application challenges for Arduino, <i>Ata Jahangir Moshayedi</i> , Ebrahim Aghajari, ISN 978-964-10-7021-4, 2025
2025/2024/ 2023	Jiangxi University of Science and Technology, Selected as the best mentor for student project
2022	Jiangxi University of Science and Technology, book award for publication(Unity in Embedded System Design and Robotics: A Step-By-Step Guide , <i>Ata Jahangir Moshayedi</i> , Amin Kolahdooz, Liao Liefu, Chapman & Hall/CRC Artificial Intelligence and Robotics, ISBN-13: 978-1032205588, ISBN-10: 103220558X.
2022	China College Students Computer Design Competition Project Title: Handy Pipe Detector, Rank: 3 rd place on National, 1 st place in Province
2021	China College Students Computer Design Competition Project Title: Pandemic-Driven Exam Assistant (PEA), Rank: 3 rd place on National, 2 th place in Province
2021	IRAN National Festival of Creativity, Innovation, and Entrepreneurship, Prize Name: Ideas worthy of international acclaim Project Title: Classroom Automatic Attendance System (CAAS) (National game)
2021	China Computer Design Competition Intelligent Service Robot Challenge, Cloud robot-based match, Project Title: RDK Cloud Robot, Rank: 3 rd place on National, 2 th place on Province
2020	Internet +, Industrial and Information Technology Education and Examination Center Project Title: Self-lecture Attendance System (SLAS), Rank: 2 nd place in central China area.
2019/20	11 th China College Students Service Outsourcing Innovation and Entrepreneurship, Competition, Rank: 2 nd place in central China area.
2019	7 th "Discovery Cup" Innovation Competition and the National College Students Internet Software Design in 2019, Project Title: Helmet Detection (H.D), Rank: 2 nd prize in central China area.
2019	7 th Festival Of Inventors Imitator Innovators, Azad University of Najafabad, 5-7 March 2019, Najafabad Branch, Iran, Project Title: "Design of ergonomic mattress recognizer system", Rank: Gold, Best Invention. (National game)
2018	International Conference on Advanced Robotics and Intelligent Control (ICARIC 2018)Jishou, Hunan, China 11-14 Oct 2018, Rank: Gold, Best robot Demo presentation
2018	IRAN OPEN 2018 (international ROBOTIC GAME) Tehran, Iran, March 2018, UAV OUTDOOR section, Rank: 3 rd place
2017	The 5th International Conference on Robotics and Mechatronics, ICROM 2017, Tehran, Iran Nov 2017. Project Title: " Pipe inspection Robot", Rank: Selected Design.
2017	A distinguished member of Young Researchers and Elite Club
2018	A distinguished member of research centre, Azad University of Khomeinishahr, Iran, 2017, 2018
2016	First awarded Design for Design and Development Solar Refrigerator from Young Researchers and Elite Club Iran.
2015	Founder of Kahroba Sanat Espadan (KSE), Elite company, Iran
2015/13	Distinguished student from representor of the Ministry of Science and Education, Iran. During PhD Course years 2010 to 2014 (Silver Grade) During MSc Course 2008 and 2009 (appreciation as best Iranian student in India)
2012	Avishkar 2012_OMC (odor movie camera) selected for round III state level from Savtribai Phule, Pune, India
2009	Distinguished student from Savtribai Phule, Pune, India, Ranked 5 th in MSC, Department of Instrumentation Science (among 47 participants), India
2009	Avishkar 2009, Design and development of fuzzy spin coater (team working) selected for round III state level from Savtribai Phule Pune University, Pune, India.

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Patents:

Approved with The Certificate:

2022, *Multi-Faceted Sediment Trap with Dust Retardant Walls and Honeycomb Arrangement System*, PN: 140150140003000126, Iran.

2018: *Design and Fabrication of Recognition System for Ergonomic Mattress and Pillow*, PN: 96911:15-07-1397, Iran.

Under review:

Submitted: 2020, *A Highly Integrated Modular Design for Embedded Robot as the Distributed System (FDR)*, PN: 2019104181189, China.

Submitted: 2019, *Novel Architecture Pipe Robot*, PN: 109854862A, China.

Copyrights in China:

No.	Title	Reference Number
1	Dr orange	2025SR1913226
2	Vsleep Sleep Posture Detection Software V1.0	2025SR1671108
3	Combine Test Tool[简称:CTT] V1.0	2025SR7622
4	Circle of fate 软件[简称:COF]V1.0	2025SR188270
5	Sitting Position Detection System v1.0	2024 SR0994613
6	Corn Detection and Estimation Software [CDE] V1.0	2024SR0587718
7	Foot Alignment Check System 1.0 Software	2024R11L0825282
8	Visual sleep Analyzer software V1.0 Vsleep	2023SR0547649
9	Pipeline defect intelligent detection system V1.0	2023SR0452001
10	Happy child	2022SR0851130
11	Pandemic-Driven Exam Assistant (PEA)	2022SR088310
12	Self-Lecture Attendance System (SLAS)	2020SR0058411
13	DDS_ Intelligent diagnosis system	2020R11L634180
14	Automatic time and attendance system (AS)	2020R11L642900
15	Table Tennis Assistant Referee System (TTA)	2020R11L634269
16	Automatic order analysis system (S.J.)	2020R11L031964

Books:

1. July 2022: **Unity in Embedded System Design and Robotics: A Step-By-Step Guide**, *Ata Jahangir Moshayedi*, Amin Kolahdooz, Liao Liefu, Chapman & Hall/CRC Artificial Intelligence and Robotics, ISBN-13: 978-1032205588, ISBN-10: 103220558X.
2. Apr 2019: **Odor Localization System Design For Gas Leakage Detection**, *Ata Jahangir Moshayedi*, D.C.Gharpure, LAP LAMBERT Academic Publishing, ISBN-13:978-613-9-44870-8, ISBN-10:6139448700, EAN:9786139448708.
3. Nov 2016: **Enjoy the Arduino programming**, *Ata Jahangir Moshayedi*, Omid Toutian Entekhab ElmiKarbodi, and Cheshmehara, ISBN: 6-220-218-964-978 (Persian language): **first academic book in Iran about Arduino approved by universities for embedded course**

Chapter Books:

- 2025
1. **Moshayedi, A.J.**, Nasab, S.T.M., Khan, Z.H., Khan, A.S. (2025). Meta-heuristic Algorithms as an Optimizer: Prospects and Challenges (Part I). In: Yang, X.S. (eds) Engineering Applications of AI and Swarm Intelligence. Springer Tracts in Nature-Inspired Computing. Springer, Singapore. https://doi.org/10.1007/978-981-97-5979-8_7.
 2. **Moshayedi, A.J.**, Nasab, S.T.M., Khan, Z.H., Khan, A.S. (2025). Meta-heuristic Algorithms as an Optimizer: Prospects and Challenges (Part II). In: Yang, X.S. (eds) Engineering Applications of AI and Swarm Intelligence. Springer Tracts in Nature-Inspired Computing. Springer, Singapore. https://doi.org/10.1007/978-981-97-5979-8_8.
 3. **Moshayedi, A.J.**, AS Khan, ZH Khan, X Zhang Safeguarding Smart Infrastructure: A Review of Deep Learning Techniques for Automatic Pipeline Defect Detection, ,Empowering AI Applications in Smart Life and Environment: 67,2025.
 4. **Moshayedi, A.J.**, Jinsong Li, Amir Sohail Khan, Zeashan Hameed Khan, Arash Sioofi Khoojine, Jiandong Hu, Mehran Emadi Andani, Service Robots in Sports: A Case Study of SLAM Implementation in Autonomous Ground Vehicle , book name : Robotics and Artificial Intelligence in Sports Medicine and Sports Services.

FUNDING

Project (1): Design and Development of Ammonia Emose System, (2022-now)

Internal Funding: Henan Agriculture University, China Prof Hu laB

Project Description: aims to create an innovative solution for monitoring and controlling ammonia emissions in industrial settings. We are developing a customized Enose system for low concentrations of ammonia gas sensing. This system will incorporate advanced sensor technology and real-time data analysis to ensure environmental compliance and safety. The project holds great potential in reducing the environmental impact of ammonia-related industries.

- ✓ **Role and Responsibilities:** Principle Investigator; Designer, Programmer
- ✓ **Technologies and Tools:** C#, C++, Unity, V.R., AR, Robotics, AI, Arduino, Raspberry Pi, ROS, Embedded System.

Project (2): Design and Development of AGV Robot, (2020-2023)

Internal Funding: Jiangxi University of Science and Technology (30,000 RMB), **Funding number:** 2021205200100563

Project Description: We are developing a customized AGV system from Design to product. The Project has two phases. In the first phase, the designed system uses various sensors like bumper, P.X., Ultrasound for obstacle detection, and magnetic sensor for navigation and the second phase uses the lidar and camera for A.I. navigation. Besides, some initial tests were conducted to Add VR as state of art under publication and

consideration. Currently, the second Phase is under test, and estimated that the project will be finished soon. As the Outcome, several papers on the topic of AGV were published, and various algorithms and methods were tested to break the price of available AGV systems.

- ✓ **Role and Responsibilities:** Principle Investigator; Designer, Programmer
- ✓ **Technologies and Tools:** C#, C++, Unity, V.R., AR, Robotics, AI, Arduino, Raspberry Pi, ROS, Embedded System.

Project (3): Design and Development of FOOD Delivery Robot (FDR), (2018-2019).

Internal Funding: Jiangxi University of Science and Technology,

Project Description: The FDR Robot is a platform designed in 2018 as my first robot design in JXUST, containing various parts like Vision, navigation, and network. The APP part and web section contain the food ordering and getting the pay tag, the robot manipulator that can distribute four foods and recognize the customer, and the web part which can analyze the rated food and ordered frequency. The design platform is under review by the China patent organization.

- ✓ **Role and Responsibilities:** Principle Investigator; Designer, Programmer
- ✓ **Technologies and Tools:** MIT APP INVENTOR, Arduino, Raspberry Pi, face recognition based on Open CV

Project (4): Android-based Scada system, (2016-2018).

External Funding: Shahid Mohammad Montazeri Power Plant, Iran (£125,000).

Project Description: The Project contains two products named:

- I- **Espad Niroo:** The first android-based SCADA APP for Iran's power plans.
- II- **Dadeneghar:** The second android-based Power Plan application in Iran.

- ✓ **Role and Responsibilities:** Team leader, principal investigator, Designer, Programmer.
- ✓ **Technologies and Tools:** Using the mobile app for data collection in the handy Scada system, Upload the data to the power plant system for the maintenance system. The Project is known as the first and second customized APP in Iran Powerplants and gets the certificate from the Power plant.

Project (5): Short Embedded project based on University Innovation Center, (2014-2018).

Internal Funding: Granted by Azad University of Khomeinishahr, Iran (£30,000).

- I- Design and Fabrication of Recognition System for Ergonomic Mattress and Pillow, 2016-2018.
- II- Design and development of Kian robot (Low-cost Kepera model), 2018-2018.
- III- Design and development Consciousness Driver Checker (CDC), 2016-2016.
- IV- Arduino-based robot for the 3rd Iranian National Robotic Games, Neyshabor, 2016-2018.
- V- Design and development of Arduino-based Enose, 2016-2016.
- VI- Design and development of Alzheimer's patient tracking device, 2015-2015.
- VII- Design and development of an android-based Automation system for the small mushroom farm, 2014-2014.

- ✓ **Role and Responsibilities:** Principle Investigator; Designer, Programmer
- ✓ **Technologies and Tools:** These projects are meant to help the P.G. and U.G. during their final thesis work and are meant for their experiment and test section. All of them are admired and presented in various exhibitions and on Iran's national TV and increase the Azad University Khomeinishahr Research Center evaluation grade. Various embedded systems are designed, and different coding languages like C, Python, LabVIEW, and Matlab are used. All mentioned designs have passed the test and prototype stage; some have been introduced to industries.

Project (6): Pune University projects in Embedded Systems (2007-2015)

Internal Funding: Savitribai Phule, Pune University, India, (£8,000)

Projects Titles:

- **Odor Movie Camera(OMC)**, Supervisor: Prof. D.C.Gharpure, Department of Electronic Science, Avishkar Innovation Game, Pune, India, 2015. **Rank:** 3rd in Maharashtra state.
- **Low-Cost Easy Electrical Management Web-Based System Analyzer on Matlab**, Supervisor: Dr D. Bodas, Department of Instrumentation Science, Avishkar Innovation Game, Pune, India, 2009. **Rank:** Selected for the prize of Satish Bihadte.
- **Design, Development, And Fabrication For Fuzzy Spin Coating System(FSC)**, Supervisor: Dr. Dhananjay Bodas, Department of Instrumentation Science, Avishkar innovation game, Pune, India, 2007, **Rank:** 2nd University and college level and selected to published on National Symposium on Instrumentation NSI 33, Hyderabad, Dec 2008.
- **Design the Embedded Solar Tracking System (STS)**, Supervisor: Dr Vijay Raybagkar, Department of Environmental Science.

- ✓ **Role and Responsibilities:** Co-Investigator; Designer, Programmer

- ✓ **Technologies and Tools:** using different tools like LabVIEW, Matlab, and C Coding language based on AVR controller and different sensors like the gas sensor in OMC, Infra Red (IR) and Ultra sensor, LDR in STS project for sensing the maximum radiation of sun during the day and Driving the D.C. Motor with the Fuzzy PWM in FSC project, accompanying with the AVR processor programming

ACADEMIC EXPERIENCES

1) **Associate Professor:** Jiangxi University of Science and Technology, Ganzhou, Jiangxi, 341000, China. 08/2018 - Present
School of Information Engineering

Duties:

- ❖ Developing the modules, coordinating with colleagues to ensure both vertical integration and full coverage of the Engineering accreditation specification, creating learning materials, delivering the teaching, and assessing students' work.
- ❖ Final project Supervision for U.G. and P.G. students.
- ❖ Formulating the research idea, creating the body of work, applying for funding, and ultimately running the Project should the funding application be successful.
- ❖ Module leader of the following modules: *Robotic, Embedded System Design, Digital System Design, and Digital Image Processing.*
- ❖ Being a tutor of the Computer Engineering Course for the following modules: *Advanced Algorithm Analysis and Design, Computer Integrated Curriculum Design, Single-chip Design, Mobile Application Programming, C/C++ Programming Language, and Desecrate Mathematics.*

2) **Lecturer:** Azad University of Khomeinishahr, Isfahan, Iran 10/2009 – 08/2018

Duties:

- ❖ Program Leader: Industrial Process UG Programme
- ❖ Formulating the research idea, creating the body of work
- ❖ Final Project supervision for PG and UG students
- ❖ Being a Module Leader and tutor of the following:
 - **course name:** MEng-Control Engineering and MEng-Mechatronics, **Subjects:** *Advanced Instrumentation, research methodology, Sensor and calibration in robots, Robotic, research methodology, Artificial Neural Network.*
 - **Course name:** BEng-Biomedical Engraining & Control Engraining, **Subjects:** *Instrumentation, Industrial Process, Microprocessor, Power Electronics, Test and measurement, Electronic Circuits, Digital, Microprocessor Lab, Electronics Lab, Digital Lab, A.C. Lab, Special Course, Power Electronics, Industrial Process, Power system analysis, Electronic Circuits, electronics.*
 - **Course name:** BEng-Power Electronics, **Subjects:** *Electronic Circuits, Lab:(Digital, Industrial Process, Test and measurement, DC motor)*
 - **Course name:** BEng-Biomedical Engraining & Control Engraining, **Subjects:** *Instrumentation, Industrial Process, Microprocessor, Computer Architecture Design Electrical and Electronic Measurement Systems, Lab: (Microprocessor, Computer Architecture Design, FPGA).*
 - **Course name:** BEng-Robotic for subjects, **Subjects:** *Sensor and robot actuators, Robot control, Power electronics, Mechatronics.*
 - **Course name:** BEng-Industrial process, **Subjects:** *Instrumentation and measurement, Process control and PLC, Instrumentation Lab.*
 - **Course name:** BEng-Mechanical Engraining, **Subjects:** *Electronic and electrical Principle (1), and (2), Robotic, Mechatronic.*

3) **Teacher Assistance (T.A.)** Savtribai Phule Pune University, Pune, India 2013_2013

Duties: TA of Prof. D.C. Gharpure; **Module:** Digital System Design

INDUSTRIAL EXPERIENCES

03/2017 – 5/2018 **Rahkoshan Espadan (RKE), Elite company, Isfahan, Iran** www.rahkoshan.ir

Position: Chief Manager and Founder of Knowledge Economy Company

- ✓ **Role and Responsibilities:** R&D section leader, Designer, Programmer
 - ✓ **Technologies and Tools:** Embedded System Design, PLC system, CIP controller system, SCADA system, Circuit Design.
 - ✓ **Highlighted Finished Project:**
 - I- Design and development of IoT based Smart home (KASHANEH) using the low-cost smart home based on Arduino
 - II- Design of D.C. to A.C. converter to run the 8-foot refrigerator as the Solar refrigerator (130wat)
 - III- Espad Niroo: The first android-based SCADA APP for Iran's power plans.
 - IV- Dadeneghar: The second android-based Power Plan application in Iran.
- Awarded:** Selected as the invention design from the Ministry of Labor and Social Affairs of Iran.

03/2015 - 03/2017 **Kahroba Sanat Espadan, Isfahan, Iran** www.KSE.ir

Position: Chief Manager and Founder of Knowledge Economy Company

- ✓ **Role and Responsibilities:** Various activities in the Installation and Calibration of Instruments and Projects
- ✓ **Technologies and Tools:** Embedded System Design, PLC system, CIP controller system, SCADA system, Circuit Design.

01/ 2014 - 03/2015 **Entekhab Group (SNOWA), Isfahan, Iran** www.snowa.ir

Position: Executive Manager of the Electrical section

- ✓ **Role and Responsibilities:** Define the new and innovative Project for the product line
- ✓ **Technologies and Tools:** Embedded System Design, Design Products, Sensor and Instrumentation, Controlling.

✓**Highlighted Finished Project:**

- Design the LabView-based online functional simulator for refrigerator products.
- Design the relay equipment's Life tester.
- Design the heater connection tester for the refrigerator product.
- Design the hydrostat sensor tester for the washing machine product.

09/2005 - 06/2007 **BARSAN: TEHRAN IRAN**

www.barsan.co.ir

Position: EPC Project Manager/Engineer project, Project leading and site activity in projects

✓**Highlighted Finished Project:**

- ✓ Cement/Naeen 63 KV Transmission Line (15 km)
- ✓ Cement/Nahavand 63 KV Transmission Line (20 km)
- ✓ Consulting of 63 KV Transmission Line and substation of cement of Naeen (15 km).
- ✓ Toos/shriven/Esfaraeen 400 KV Transmission Line (235 km EPC)
- ✓ The first DBF project in Iran in the Power Ministry

09/2004 – 09/2005

MOSHANIR: TEHRAN_IRAN

www.moshanir.com

Position: EPC Engineer Project

- ✓ **Role and Responsibilities:** Project Manager.

✓**Highlighted Finished Project:**

- ✓ BESAT KALAN 230 KV Transmission Line (20 km Turnkey),
- ✓ Parand/Qom/Saveh 230 KV Transmission Line (20 km Turnkey)
- ✓ Qom2/Qom3 230 KV Transmission Line (235 km Turnkey)

EDUCATION

Institution/Awarding Body	Start Date	End Date
Savtribai Phule Pune University, Pune, India	10/2009	03/2016
Subject	Type / Qualification	GPA
Electronic Science - Mobile Olfaction(mechatronic)	PhD / Distinction	A

Thesis Title: “*Design and Development of Odor localization system for Gas leakage detection*” (Thesis Grade: Very Good)

Skills:

- ✓ Implement and invent the new bio-inspired algorithm (PB) for gas leak detection and use as an odor source localizer robot
- ✓ propose and introduce the new gas sensor mathematical model based on the first and second-order transfer functions.

Awarded: Design the mobile olfaction robot with a novel bio-inspired algorithm to detect the pipeline gas leak

- ✓ The thesis was published as the book: ISBN-13:978-613-9-44870-8, ISBN-10: 6139448700, EAN: 9786139448708.

Institution/Awarding Body	Start Date	End Date
Savtribai Phule Pune University, Pune, India	07/2007	07/2009
Subject	Type / Qualification	GPA
Instrumentation Science	MSc / Distinction	4.48/6 B grade

Thesis Title: MSc. Thesis: **Ethernet Solutions for low-cost web-based SCADA System Integrators to EMS(Electrical Management Systems)**

MSc Seminar Topic: **Application of Neural network wrt to Korhonen’s model in Instrumentation**

(Thesis Mark: **Excellent - O**; Industrial Project Mark: **Excellent - O**)

Skills:

- ✓ I developed a web-based SCADA used as the energy-saving tool inbuilt inside the Matlab to give the command to the controller.
- ✓ **Awarded:** “Best Student Award 5th rank” out of 45 among MSc students Savtribai Phule Pune University, India.
Second international student in the Department of Instrumentation Science, Savtribai Phule Pune University, Pune, India.

Institution/Awarding Body	Start Date	End Date
Azad University of Khomeinishahr, Isfahan, Iran	08/1999	06/2004
Subject	Type / Qualification	GPA
Power Electrical Engineering	BSc / Distinction	pass

PROFESSIONAL TRAINING.

- ✓ Python Programming course, Azad University of Khomeinishahr, Iran, 2018.
- ✓ UAV Course (introduction and Design), Azad University of Khomeinishahr University, Iran, 2018.
- ✓ Teaching criteria and challenges, Elemi Karbordi University, Iran, 2016.
- ✓ New energy sources and technology, Chinchwad Engineering College, Pune, India 2014.
- ✓ Instrumentation and Robotic Surgery, Savtribai Phule, Pune, India, 2012.
- ✓ LabVIEW N.I., National Instrument Learning Series, Savtribai Phule, Pune, India, 2009-2013.
- ✓ Matlab & Simulink for Engineering, Math Works, Pune, India, 2012.
- ✓ Research Methodology, Ferguson College, Pune, India, 2012.
- ✓ Reliability and High-Temperature Sensor, ISPTS 2011, Savtribai Phule Pune University, Pune, India, 2011.
- ✓ Linux, CMS Center, Savtribai Phule Pune University, India, 2011.
- ✓ SCADA, PLC, Savtribai Phule, Pune, India, 2007.

PROFESSIONAL MEMBERSHIPS

Since 2024	IEEE senior member, ACM professional member, CCF Member
Since 2008	IEEE Society (Robotics and Automation Society, Instrumentation, Communication), IEEE Young Professionals.
Since 2014	Life Time (L.M.) Membership - Speed Society, Pune, India.
Since 2007	Life Time (L.M.) Membership - Instrumentation of India, India.
2004-2006	Iranian Association of Electrical and Electronics Engineers, Iran.

KNOWLEDGE OF COMPUTER SCIENCE

Programming Languages: Python, Arduino, MIT Mobile application development, Java, ROS, C, C++, Unity Assembly, Matlab, Simulink, LabView, Outolips, Dynamic C, VB, Delphi7.

Software: Microsoft Offices, AutoCAD, Dig silent, OrCAD, MS Project, Photoshop.

Operating System: Advance User Of Windows OS, DOS, Linux, Code Vision, Keli Cross Compiler For 8051, PCB Design, Altium Designer, TI Programming: Transmission Line And Substation Design.

KNOWLEDGE OF LANGUAGE

Languages: English (Fluent), Persian (native), Arabic (Intermediate), Urdu/Hindi (Upper Intermediate), Chinese (Intermediate)

RECENT PUBLICATION

<i>Ata Jahangir Moshayedi (28 OCT 2025)</i>	All	Since 2020
Citations	1960	1905
h-index	26	25
i10-index	60	59

2025: Till 2025.5

2025_ Chapter book

- **Moshayedi, A.J.**, Nasab, S.T.M., Khan, Z.H., Khan, A.S. (2025). Meta-heuristic Algorithms as an Optimizer: Prospects and Challenges (Part I). In: Yang, X.S. (eds) Engineering Applications of AI and Swarm Intelligence. Springer Tracts in Nature-Inspired Computing. Springer, Singapore. https://doi.org/10.1007/978-981-97-5979-8_7.
- **Moshayedi, A.J.**, Nasab, S.T.M., Khan, Z.H., Khan, A.S. (2025). Meta-heuristic Algorithms as an Optimizer: Prospects and Challenges (Part II). In: Yang, X.S. (eds) Engineering Applications of AI and Swarm Intelligence. Springer Tracts in Nature-Inspired Computing. Springer, Singapore. https://doi.org/10.1007/978-981-97-5979-8_8.
- **Moshayedi, A.J.**, AS Khan, ZH Khan, X Zhang Safeguarding Smart Infrastructure: A Review of Deep Learning Techniques for Automatic Pipeline Defect Detection, ,Empowering AI Applications in Smart Life and Environment: 67,2025.
- **Moshayedi, A.J.** ,Jinsong Li, Amir Sohail Khan, Zeashan Hameed Khan, Arash Sioofi Khoojine, Jiandong Hu, Mehran Emadi Andani, Service Robots in Sports: A Case Study of SLAM Implementation in Autonomous Ground Vehicle , book name : Robotics and Artificial Intelligence in Sports Medicine and Sports Services.
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2025_Journal

- **Moshayedi, A.J.,**, A. M. Aghda, S. A. Eftekhari, M. E. Andani, and S. Salahshour, "Respiratory parameter estimation using pharyngeal phonetics and machine learning: Breaking free from spirometry," *Engineering Applications of Artificial Intelligence*, vol. 160, p. 111989, 2025. (SJR: Q1: 1.652, SCI Z1)
- **Moshayedi, A.J.,**, B. Firouzi, M. J. Jawadi, and X. Zhang, Majid Elyasi "A comprehensive review and comparative analysis of water hardness and quality detection methods: Chromatography, E-nose technology, and image-based techniques," *International Journal of Engineering*, 2025. (SJR: Q2: 0.57, SCI Z4)
- **Moshayedi, A.J.,** A. , Nowzari, R. , Taherinezhad, M. , Esmaceli Najafabadi, H. , Sohail Khan, A. , Ghadiri Nejad, M. and Ghanbari, N. (2025). Investigation and characterization of pipe defects and challenge toward the guarantee of environmental chemical protection. *Iranian Journal of Chemistry and Chemical Engineering*, -. doi: 10.30492/ijcce.2025.2051834.6993, (SJR: Q3: 0.240, SCI Z4)
- **Moshayedi, A.J,** AS Roy, ZH Khan, H Lan, H Lotfi, X Zhang, EMTIHAN: Design of a novel approach to secure online examination challenge in remote learning, *Education and Information Technologies* 30 (7), 9573-9604, 2025 (SJR: Q1: 1.654 , SCI Z2)
- **Moshayedi, A.J,** Z Wang, M Sharifdoust, AS Khoojine, W Zhang, ...Smart Farming Solutions: A User-Friendly GUI for Maize Tassel Estimation Using YOLO with Dynamic and Fixed Labelling, Featuring Video Support, *IEEE Access*, 2025 (SJR: 0.849 Q1, SCI: Z3)
- **Moshayedi, A.J,** Amir Sohail Khan, Ming Chen, PPP , ENose: a new frontier for non-invasive cancer detection and monitoring, *Journal of Cancer Metastasis and Treatment* 11 (6), 1-16, 2, 2025 (SJR: 0.485 Q3, SCI: Z4)
- **Moshayedi, A.J,** AS Khan, K Geng, J Hu, A Kolahdooz, Advancing Agricultural Practices: Analyzing the Role of Robotics in Corn Farming, *International Journal of Engineering (IJE)* 38 (7), 1517-1532, 3, 2025. (SJR: 0.347, Q2, SCI: Z4)
- **Moshayedi, A.J.,** Roy, A. S., Ghorbani, H., Lotfi, H., Zhang, X., Liao, L., & Gheisari, M. (2024). A novel IoT-enabled portable, secure automatic self-lecture attendance system: design, development and comparison. *International Journal of Electronic Security and Digital Forensics*, 16(6), 663-689. October 7, 2024 <https://doi.org/10.1504/IJESDF.2024.142009> (SJR: 0.189, Q2, SCI: Z4)
- **Moshayedi, A.J,** Mokhtari, T., & Emadi Andani, M. (2025). Brain Stimulation Techniques in Research and Clinical Practice: A Comprehensive Review of Applications and Therapeutic Potential in Parkinson's Disease. *Brain Sciences*, 15(1), 20. <https://doi.org/10.3390/brainsci15010020> (SJR: 0.796, Q3, SCI: Z3)
- A. Bastola, H. Wang, S. P. H. Boroujeni, J. Brinkley, **Moshayedi, A.J,** and A. Razi, "Driving Toward Inclusion: A Systematic Review of AI-Powered Accessibility Enhancements for People With Disability in Autonomous Vehicles," in *IEEE Access*, vol. 13, pp. 61384-61415, 2025, doi: 10.1109/ACCESS.2025.3555923. (SJR: 0.849, Q1, SCI: Z3)
- J Lai, X Zhang, S Liu, S Zhong, **Moshayedi, A.J,** Blockchain-based VANET edge computing-assisted cross-vehicle enterprise authentication scheme, *Computer Communications* 231, 108040, 1, 2025 (SJR: 1.42, Q1, SCI: Z3)
- Xu, J., Zhang, X. & **Moshayedi, A.J.** Correction: Nonlinear coexistence phenomenon and FPGA implementation with the hybrid of memristive–memcapacitive hyperchaotic system. , *European Physical Journal Plus* , 140, 52 (2025). <https://doi.org/10.1140/epjp/s13360-025-06012-w> (SJR: 1.42, Q1, SCI: Z3)

2025_EI_Conference

- H. Lu, **Moshayedi, A.J,** M. Wang, B. Guo, and D. Bassir, "Advancements and challenges in UAV-based gas detection: A review of emerging technologies," in *Smart Manufacturing, Structural Health Monitoring and Digital Twins*, pp. 90–97, IOS Press, 2025.
- M. Wang, **Moshayedi, A.J,** H. Lu, B. Guo, and D. Bassir, "Integration of electronic noses and UAVs for intelligent gas detection: A review of methods and challenges," in *Smart Manufacturing, Structural Health Monitoring and Digital Twins*, pp. 82–89, IOS Press, 2025.
- Syed Ali Ishaq, Neelum Yousaf, Hafiz Zia Ur Rehman, Zeashan Khan, and **Moshayedi, A.J** "Deep learning-based change detection in quadcopter aerial images", *Proc. SPIE 13697, Third Asia Conference on Computer Vision, Image Processing, and Pattern Recognition (CVIPPR 2025)*, 136970R (21 July 2025); <https://doi.org/10.1117/12.3076283>
- **Moshayedi, A.J,** Atanu Shuvam Roy, Zeashan Ahmed Khan , Shuxing Yang, Urban Park: Advancing Parking Infrastructure with LoRaWAN-enabled Smart Parking Modules, 4th ICCIT CONFERENCE TABUK, KINGDOM OF SAUDI ARABIA, 13-15 April 2025 (IEEE_EI index: In press)
- **Moshayedi, A.J,** Zou Zhenpeng, Atanu Shuvam Roy, Amin Kolahdooz , XiaoQiang AVG Robot Navigation Performance: Comparative Study of LiDAR and Kinect in Physical and Virtual Scenarios, The 5th International Conference on Frontiers of Electronics, Information and Computation Technologies June 27-29, 2025, Ningbo, China (Springer_EI index: Accepted)
- Yiguo Yang , Shuai Li, Pin Wu, **Moshayedi, A.J,**, Weibing Feng , "Design and Analysis of a Novel Zeroing Neural Network for Matrix Decomposition under Data Loss and Noise Interference", *Applied Mathematical Modelling*, (SJR: 1, Q1, SCI: Z2)

2024 :

2024_Conference:

- **Moshayedi, A.J,** Mohammad Jalil Jawadi, Atanu Shuvam Roy, Elahe Rostami, Zhonghua Wang, Liqin Yang, and Qun Xu. Dr_OrangeApp: Revolutionizing Real-Time Pest Detection in Citrus Orchards. *Proceedings of the 4th Asia-Pacific Artificial Intelligence and Big Data Forum*. <https://doi.org/10.1145/371849.3718618>, (EI index_Best paper Award.

- **Moshayedi, A.J**, Sahar Erfanian Erfanian, Mohammad Jalil Jawadi, and Huo Liang. 2025. DSS: Enhancing Home Appliance Fault Detection through a CRM-Based Diagnostic Smart System. In Proceedings of the 4th Asia-Pacific Artificial Intelligence and Big Data Forum (AIBDF '24). <https://doi.org/10.1145/3718491.3718617>, (EI index_ Best paper Award)
- **J. Moshayedi**, Y. Yu, K. Savoji and M. E. Andani, "Comfort Shoulder (Rhomboid Major) Muscles Chair Identifier System," *2024 6th International Conference on Communications, Information System and Computer Engineering (CISCE)*, Guangzhou, China, 2024, pp. 1505-1509, doi: 10.1109/CISCE62493.2024.10653444.
- **J. Moshayedi**, I. Lskar, S. Yang, S. K. Shinde, A. Razi and M. E. Andani, "IOTToe: A Smart System for In/Out-Toeing Foot Identification," *2024 6th International Conference on Communications, Information System and Computer Engineering (CISCE)*, Guangzhou, China, 2024, pp. 1510-1514, doi: 10.1109/CISCE62493.2024.10653297.
- S. M. Zanjani, M. Dolatshahi, M. Dousti, Z. Alaie, **Moshayedi A.J** and A. Mehrabi, "Frequency Response and Design Based on gm/ID of Amplifier in CNFET Technology," *2024 6th Iranian International Conference on Microelectronics (IICM)*, Tabriz, Iran, Islamic Republic of, 2024, pp. 1-6, doi: 10.1109/IICM65053.2024.10824539.
- Nimbale Sharadkumar Mallikarjun, Jadhav Bharat Tayyapa, **Moshayedi, A. J**, and Shinde Shashikant Kisanrao, "Performance Analysis of ANN Control Chart For Monitoring the Individual Measurements of Manufacturing Process," vol. 5, pp. 130–135, Jul. 2024, doi: <https://doi.org/10.1145/3689299.3689323>.
- Talha Ahmad, Taimoor Ishtiaq Butt, Muhammad Ramiz, Hafiz Zia Ur Rahman, Zeashan Hameed Khan and **Moshayedi, A.J**, CLEANtech: Design of an Autonomous Indoor Floor Cleaning Robot, 3rd International Conference on Sensing, Measurement, Communication and Internet of Things Technologies (SMC-IoT 2024) (EI index_ Springer nature: ,In press)
- Zeashan Hameed Khan, Romana Riyaz, and **Moshayedi, A.J**, Reliability Challenges of AI on the Road: A Case Study of Self-Driving Cars, 3rd International Conference on Sensing, Measurement, Communication and Internet of Things Technologies (SMC-IoT 2024) (EI index_ Springer nature ,In press)
- Faiza Sindhu , Hafiz Zia Ur Rehman , Zeashan Khan and **Moshayedi, A.J** ,Automated Detection and Classification of Sleep Spindles using Machine Learning and Signal Processing Techniques , Moda 24, France (In press)
- Syed Ali Ishaq, Neelum Yousaf, Hafiz Zia Ur Rehman, Zeashan Khan, **Moshayedi, A.J**, Deep learning based Change Detection in Quadcopter Aerial Images, 2025 3rd Asia Conference on Computer Vision, Image Processing and Pattern Recognition (CVIPPR 2025), Xiamen, China Jun, 2025(EI index_ Springer nature ,In press)
- S. M. Zanjani, M. Dolatshahi, M. Dousti, Z. Alaie, **Moshayedi, A.J** and A. Mehrabi, "Frequency Response and Design Based on gm/ID of Amplifier in CNFET Technology," *2024 6th Iranian International Conference on Microelectronics (IICM)*, Tabriz, Iran, Islamic Republic of, 2024, pp. 1-6, doi: 10.1109/IICM65053.2024.10824539,(EI index_ IEEE)
- Nimbale Sharadkumar Mallikarjun, Jadhav Bharat Tayyapa, **Moshayedi, A.J**, and Shinde Shashikant Kisanrao. 2024. Performance Analysis of ANN Control Chart For Monitoring the Individual Measurements of Manufacturing Process. In Proceedings of the 2024 3rd International Symposium on Robotics, Artificial Intelligence and Information Engineering (RAIIE '24). (EI index_ ACM)
- Kimia savoji, Moshayedi, A.J, Real-Time SVM Classification of EMG Signals for Detecting Finger Movements in Prosthetic and Robotic Arm Control (ICRAIC 2024) ICRAIC 2024,Changsha China ICRAIC 2024 Dec.6-9,2024 (EI index_ Best paper Award)

2024_ Journal

- **Moshayedi, A.J.**, Khan, A., Yang, Y., Hu, J., & Kolahdooz, A. (2024). Robots in agriculture: Revolutionizing farming practices. *EAI Endorsed Transactions on AI and Robotics*, 3.(SJR .Q2) Scopus Index
- **Moshayedi, A. J**, T. Mokhtari, and Mehran Emadi Andani, "Brain Stimulation Techniques in Research and Clinical Practice: A Comprehensive Review of Applications and Therapeutic Potential in Parkinson's Disease," *Brain Sciences*, vol. 15, no. 1, pp. 20–20, Dec. 2024, doi: <https://doi.org/10.3390/brainsci15010020>.
- **Moshayedi, A.J.**, Roy, A.S., Khan, Z.H. et al. EMTIHAN: Design of a novel approach to secure online examination challenge in remote learning. *Educ Inf Technol* (2024). <https://doi.org/10.1007/s10639-024-13170-4>
- J. Lai, X. Zhang, S. Liu, S. Zhong, and **Moshayedi, A. J**, "Blockchain-based VANET edge computing-assisted cross-vehicle enterprise authentication scheme," *Computer Communications*, pp. 108040–108040, Dec. 2024, doi: <https://doi.org/10.1016/j.comcom.2024.108040>.
- K. Suresh Kumar,A.S. Radha Mani,T. Ananth Kumar,Ahmad Jalili,Mehdi Gheisari,Yasir Malik,Hsing-Chung Chen &**Moshayedi, A. J** , "Sentiment Analysis of Short Texts Using SVMs and VSMs-Based Multiclass Semantic Classification," *Applied Artificial Intelligence*, vol. 38, no. 1, Mar. 2024, doi: <https://doi.org/10.1080/08839514.2024.2321555>.
- X. Zhang, J. Xu, and **Moshayedi, A. J**, "Design and FPGA implementation of a hyperchaotic conservative circuit with initial offset-boosting and transient transition behavior based on memcapacitor," *Chaos Solitons & Fractals*, vol. 179, pp. 114460–114460, Jan. 2024, doi: <https://doi.org/10.1016/j.chaos.2024.114460>.
- Xu, J., Zhang, X. & **Moshayedi, A. J**. Nonlinear coexistence phenomenon and FPGA implementation with the hybrid of memristive–memcapacitive hyperchaotic system. *Eur. Phys. J. Plus* 139, 393 (2024). <https://doi.org/10.1140/epjp/s13360-024-05176-1>.
- **Moshayedi, A. J.** , Taheri Mehdi, Heidari Ali, Abd Alreda Baraa, Yuan Yanjie, Heidarshenas Behzad , Toghraie D., "Fuzzy modeling and characterization of mechanical and biological properties of a selective laser melting shape: A comprehensive study", *Optics & Laser Technology*, Volume 170,2024,110171,<https://doi.org/10.1016/j.optlastec.2023.110171>. ,(SCI:Z2, SJR=Q1, IF=5)
- K. Suresh Kumar,A.S. Radha Mani,T. Ananth Kumar,Ahmad Jalili,Mehdi Gheisari,Yasir Malik,Hsing-Chung Cheni, **Moshayedi, A. J.** , "Sentiment analysis of short texts using svms and VSMS-based multiclass semantic classification," *Applied Artificial Intelligence*, vol. 38, no. 1, Mar. 2024. doi:10.1080/08839514.2024.2321555 ,(SCI:Z3, SJR=Q3, IF=2.78)
- **Moshayedi, A. J.** , A. S. Roy, L. Liao, A. S. Khan, A. Kolahdooz and A. Eftekhari, "Design and Development of FOODIEBOT Robot: From Simulation to Design," in *IEEE Access*, vol. 12, pp. 36148-36172, 2024, doi: 10.1109/ACCESS.2024.3355278. ,(SCI:Z3, SJR=Q1, IF=3.476)

- Emadi Andani, Mehran, Bahar Lotfalian, and **Moshayedi, A. J.** 2024. "Designing and Manufacturing an Affordable and Easy to Use Visual Bio Feedback Device to Fix Forward Head Posture: A Pilot Study Involving Female Students" *Applied Sciences* 14, no. 2: 781. <https://doi.org/10.3390/app14020781>, (SCI:Z4, SJR=Q1, IF=2.838)
- Zhang, X., Xu, J. and **Moshayedi, A. J.** (2024) 'Design and FPGA implementation of a hyperchaotic conservative circuit with initial offset-boosting and transient transition behavior based on memcapacitor', *Chaos, Solitons & Fractals*, 179, p. 114460. doi:10.1016/j.chaos.2024.114460. (SCI:Z1, SJR=Q1, IF=7.8).
- Mehran Emadi Andani, Bahar Lotfalian, and **Moshayedi, A. J.**, "Designing and Manufacturing an Affordable and Easy to Use Visual Bio Feedback Device to Fix Forward Head Posture: A Pilot Study Involving Female Students," *Applied Sciences*, vol. 14, no. 2, pp. 781–781, Jan. 2024, doi: <https://doi.org/10.3390/app14020781>.
- K Suresh Kumar, AS Radha Mani, T Ananth Kumar, A Jalili, M Gheisari **Moshayedi, A.J.**, Sentiment analysis of short texts using SVMs and VSMs-based multiclass semantic classification, *Applied Artificial Intelligence* 38 (1), 2321555 15,2024, (SJR: 0.598, Q2,SCI:Z4)

2024_ Other Index :

- Savoji, K., Soleimani, M., & **Moshayedi, A.J.** (2024). A Comprehensive Review of Electromyography in Rehabilitation: Detecting Interrupted Wrist and Hand Movements with a Robotic Arm Approach. *EAI Endorsed Transactions on AI and Robotics*, (SJR_Q2)
- **Moshayedi, A. J.**, AS Roy, H Ghorbani, H Lotfi, X Zhang, L Liao, M Gheisari, "A novel IoT-enabled portable, secure automatic self-lecture attendance system: design, development and comparison," *International Journal of Electronic Security and Digital Forensics*, vol. 16, no. 6, pp. 663–689, Jan. 2024, doi: <https://doi.org/10.1504/ijesdf.2024.142009>.
- **Moshayedi, A. J.**, A. S. Khan, K. Geng, J. Hu, and A. Kolahdooz, "Advancing Agricultural Practices: Analyzing the Role of Robotics in Corn Farming," *International Journal of Engineering*, vol. 38, no. 7, pp. 1517–1532, Jan. 2025, doi: <https://doi.org/10.5829/ije.2025.38.07a.07>.
- Savoji, Kimia, Masoumeh Soleimani, and **Moshayedi A.J.** "A Comprehensive Review of Electromyography in Rehabilitation: Detecting Interrupted Wrist and Hand Movements with a Robotic Arm Approach." *EAI Endorsed Transactions on AI and Robotics* 3 (2024).
- **Moshayedi, A. J.**, A. Sohail Khan, Y. Yang, J. Hu, and A. Kolahdooz, "Robots in Agriculture: Revolutionizing Farming Practices", *EAI Endorsed Trans AI Robotics*, vol. 3, Jun. 2024.
- **Moshayedi, A. J.**, AS Khan, M Davari, T Mokhtari, ME Andani,(2024) 'Micro robot as the feature of robotic in healthcare approach from design to application: The State of Art and Challenges', *EAI Endorsed Transactions on AI and Robotics*, 3. doi:10.4108/airo.5602.
- **Moshayedi, A. J.**, Yibin Xie, Maryam Sharifdoust, Amir Sohail Khan "Evaluating OMNI Robot Navigation with SLAM in CoppeliaSim: Hemangiomas and Nonhomogeneous Paths." *transformation* 1 (2024): v2.
- W. Li, J. Jing, Y. Chen, X. Chen and **Moshayedi, A. J.**, "Evolutionary Experience-Driven Particle Swarm Optimization with Dynamic Searching," in *Complex System Modeling and Simulation*, vol. 3, no. 4, pp. 307-326, December 2023, doi: 10.23919/CSMS.2023.0015.

2023 :

2023_ Journal :

- Abdulraheem, M.I.; Zhang, W.; Li, S.; **Moshayedi, A. J.**, Farooque, A.A.; Hu, J. Advancement of Remote Sensing for Soil Measurements and Applications: A Comprehensive Review. *Sustainability* **2023**, *15*, 15444. <https://doi.org/10.3390/su152115444>(SCI=Z3,SJR=Q1, 0.664 Score, IF 3.9)
- **Moshayedi, A. J.**, Uddin, N. M. I., Khan, A. S., Zhu, J., & Emadi Andani, M. (2023). Designing and Developing a Vision-Based System to Investigate the Emotional Effects of News on Short Sleep at Noon: An Experimental Case Study. *Sensors*, *23*(20), 8422.(SCI=Z3,SJR=Q1, 0.76 Score, IF 3.9)
- **Moshayedi, A. J.**, Uddin, N.M.I., Zhang, X. and Emadi Andani, M. (2023), "Exploring the role of robotics in Alzheimer's disease care: innovative methods and applications", *Robotic Intelligence and Automation*(previous name : Assembly Automation), Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/RIA-04-2023-0045>.(SCI=Z4, SJR=Q3, 0.537 Score, IF 2.1)
- **Moshayedi, A. J.**; Sohail Khan, A.; Hu, J.; Nawaz, A.; Zhu, J. E-Nose-Driven Advancements in Ammonia Gas Detection: A Comprehensive Review from Traditional to Cutting-Edge Systems in Indoor to Outdoor Agriculture. *Sustainability* **2023**, *15*, 11601. <https://doi.org/10.3390/su151511601>.(SCI=Z3,SJR=Q1, 0.664 Score, IF 3.9)
- **Moshayedi, A. J.**, Jafari Harandi, M., Keshavarzi, A., & Heidari, F. (2023). Feasibility Assessment of Sediment Trappers Design from Structure to Simulation in Iran: Study and Comparison. *Iranian Journal of Chemistry and Chemical Engineering*. SCI=Z4,SJR=Q3, 0.28 Score, IF=1.8).
- **Moshayedi, A. J.**, Hosseinzadeh, M., Joshi, B. P., & Emadi Andani, M. (2023). Recognition System for Ergonomic Mattress and Pillow: Design and Fabrication. *IETE Journal of Research*, 1-19.(SCI=Z4,SJR=Q3, 0.29 Score,IF=1.5)
- Gao, Y., **Moshayedi, A. J.**, Sanatizadeh, E., Behfarnia, P., Kolamroudi, M. K., Semirumi, D., & Yusof, M. (2023). Analysis of amorphous structure with polycaprolactone-hydroxyapatite nanoparticles fabricated by 3D bioprinter technique for bone tissue engineering. *Ceramics International*, *49*(10), 16053-16060.SCI= Z1,SJR=Q1, 0.92 Score, IF=5.2)
- Zhang, X., Lai, J., & **Moshayedi, A. J.** (2023). Traffic data security sharing scheme based on blockchain and traceable ring signature for VANETs. *Peer-to-Peer Networking and Applications*, 1-18.(SCI=Z4,SJR=Q2, 0.87 Score, IF 4.2)
- Yang, G., Zhang, X., & **Moshayedi, A. J.** (2023). Implementation of the Simple Hyperchaotic Memristor Circuit with Attractor Evolution and Large-Scale Parameter Permission. *Entropy*, *25*(2), 203.(SCI=Z3,SJR= Q2, 0.54 Score, IF=2.7)

2023_Conference : EI index

- Alzorgan, H., Razi, A., & **Moshayedi, A. J** (2023). Actuator Trajectory Planning for UAVs with Overhead Manipulator using Reinforcement Learning. arXiv preprint arXiv:2308.12843., 2023 Workshop : 5th IEEE Workshop on Wireless Networking, Planning, and Computing for UAV Swarms (SwarmNet) 2023: PIMRC'23 WS SwarmNet.(**IEEE conference , EI index**) .
- Geng, K., **Moshayedi, A. J**, Chen, J., Hu, J., & Zhang, H. (2023). ENOSE Performance in Transient Time and Steady State Area of Gas Sensor Response for Ammonia Gas: Comparison and Study. Paper presented at the Proceedings of the 2023 2nd Asia Conference on Algorithms, Computing and Machine Learning.(**ACM conference , EI index**)
- Moshayedi, A. J**, Soleimani, M., Marani, M., Yang, S., Razi, A., & Andani, M. E. (2023). Fingerprint Identification Banking (FIB); Affordable and Secure Biometric IOT Design. Paper presented at the 2023 4th International Seminar on Artificial Intelligence, Networking and Information Technology (AINIT). (**IEEE conference , EI index**) .
- Zarei, M., **Moshayedi, A. J**, Zhong, Y., Khan, A. S., Kolahdooz, A., & Andani, M. E. (2023). Indoor UAV Object Detection Algorithms On Three Processors: Implementation Test And Comparison. Paper presented at the 2023 3rd International Conference on Consumer Electronics and Computer Engineering (ICCECE). (**IEEE conference , EI index**) .

2023_Other Index :

- Durojaye, A., Kolahdooz, A., Nawaz, A., & **Moshayedi, A. J** (2023). Immersive Horizons: Exploring the Transformative Power of Virtual Reality Across Economic Sectors. *EAI Endorsed Transactions on AI and Robotics*, 2(1), e6-e6.
- Marani, M., Soltani, M., Bahadori, M., Soleimani, M., & **Moshayedi, A. J** (2023). The Role of Biometric in Banking: A Review. *EAI Endorsed Transactions on AI and Robotics*, 2(1).
- Moshayedi, A. J**, Khan, A. S., Shuxin, Y., Kuan, G., Jiandong, H., Soleimani, M., & Razi, A. (2023). E-Nose design and structures from statistical analysis to application in robotic: a compressive review. *EAI Endorsed Transactions on AI and Robotics*, 2(1), e1-e1.
- Moshayedi, A. J**, Reza, K. S., Khan, A. S., & Nawaz, A. (2023). Integrating Virtual Reality and Robotic Operation System (ROS) for AGV Navigation. *EAI Endorsed Transactions on AI and Robotics*, 2(1), e3-e3.
- Moshayedi, A. J**, Roy, A. S., Taravet, A., Liao, L., Wu, J., & Gheisari, M. (2023). A secure traffic police remote sensing approach via a deep learning-based low-altitude vehicle speed detector through uavs in smart cites: Algorithm, implementation, and evaluation. *Future Transportation*, 3(1), 189-209.

2022

2022_Book:

Moshayedi, A. J, Kolahdooz, A., & Liao, L. (2022). *Unity in Embedded System Design and Robotics: A Step-by-step Guide*: CRC Press.

Journal :

- Abbasi, A., MahmoudZadeh, S., Yazdani, A., & **Moshayedi, A. J** (2022). Feasibility assessment of Kian-I mobile robot for autonomous navigation. *Neural Computing and Applications*, 1-20.(**SCI=Z3,SJR=Q1, 1.17**)
- Mehmood, U., Agyekum, E. B., Kamel, S., Shahinzadeh, H., & **Moshayedi, A. J** (2022). Exploring the roles of renewable energy, education spending, and co2 emissions towards health spending in South Asian countries. *Sustainability*, 14(6), 3549.(**SCI=Z3,SJR=Q1, 0.66 Score**)
- Moshayedi, A. J**, Chen, Z.-y., Liao, L., & Li, S. (2022). Sunfa Ata Zuyan machine learning models for moon phase detection: algorithm, prototype and performance comparison. *TELKOMNIKA (Telecommunication Computing Electronics and Control)*, 20(1), 129-140.(**SJR=Q3, 0.29 Score**)
- Moshayedi, A. J**, Li, J., Sina, N., Chen, X., Liao, L., Gheisari, M., & Xie, X. (2022). Simulation and validation of optimized pid controller in agv (automated guided vehicles) model using pso and bas algorithms. *Computational Intelligence and Neuroscience*, 2022.(**SCI=Z3**)

2022_Other Index :

- Moshayedi, A. J**, Roy, A. S., Kolahdooz, A., & Shuxin, Y. (2022). Deep learning application pros and cons over algorithm deep learning application pros and cons over algorithm. *EAI Endorsed Transactions on AI and Robotics*, 1(1).
- Moshayedi, A. J**, Roy, A. S., Liao, L., Lan, H., Gheisari, M., Abbasi, A., & Bamakan, S. M. (2022). Automation Attendance Systems Approaches: A Practical Review. *BOHR International Journal of Internet of things, Artificial Intelligence and Machine Learning*, 1(1), 25-34.
- Moshayedi, A. J**, Roy, A. S., Sambo, S. K., Zhong, Y., & Liao, L. (2022). Review on: The service robot mathematical model. *EAI Endorsed Transactions on AI and Robotics*, 1(1).
- Uddin, N. M. I., **Moshayedi, A. J**, & Shuxin, Y. (2022). The Face Detection/Recognition, Perspective and Obstacles In Robotic: A Review. *EAI Endorsed Transactions on AI and Robotics*, 1(1), e14-e14.
- Xu, G., Khan, A. S., **Moshayedi, A. J**, Zhang, X., & Shuxin, Y. (2022). The Object Detection, Perspective and Obstacles In Robotic: A Review. *EAI Endorsed Transactions on AI and Robotics*, 1(1).

2022_Conference : EI index

- Moshayedi, A. J**, Khan, A. S., Yang, S., & Zanjani, S. M. (2022). Personal image classifier based handy pipe defect recognizer (HPD): design and test. Paper presented at the 2022 7th International Conference on Intelligent Computing and Signal Processing (ICSP). (**IEEE conference , EI index**) .
- Moshayedi, A. J**, Kolahdooz, A., Roy, A. S., Rostami, S. A. L., & Xie, X. (2022). Design and promotion of cost-effective IOT-based heart rate monitoring. Paper presented at the International Conference on Cloud Computing, Internet of Things, and Computer Applications (CICA 2022). (**IEEE conference , EI index**) .
- Moshayedi, A. J**, Sambo, S. K., & Kolahdooz, A. (2022). Design and development of cost-effective exergames for activity incrementation. Paper presented at the 2022 2nd International Conference on Consumer Electronics and Computer Engineering (ICCECE). (**IEEE conference , EI index**) .

- **Moshayedi, A. J.**, Zanjani, S. M., Xu, D., Chen, X., Wang, G., & Yang, S. (2022). Fusion BASED AGV robot navigation solution comparative analysis and VREP simulation. Paper presented at the 2022 8th Iranian Conference on Signal Processing and Intelligent Systems (ICSPIS). (IEEE conference , EI index) .
- Zanjani, S. M., **Moshayedi, A. J.**, Shahinzadeh, H., Fayaz-Dastgerdi, M.-H., Yaïci, W., & Moradi, J. (2022). Data-Driven Model Predictive Control for Load-Frequency Control in Islanded Microgrids. Paper presented at the 2022 8th Iranian Conference on Signal Processing and Intelligent Systems (ICSPIS). (IEEE conference , EI index) .
- 2021_Conference : EI index**
- **Moshayedi, A. J.**, Li, J., & Liao, L. (2021). Simulation study and PID tune of automated guided vehicles (AGV). Paper presented at the 2021 IEEE International Conference on Computational Intelligence and Virtual Environments for Measurement Systems and Applications (CIVEMSA). (IEEE conference , EI index) .

2021_Other Index :

- **Moshayedi, A. J.**, Xu, G., Liao, L., & Kolahdooz, A. (2021). Gentle Survey on MIR Industrial Service Robots: Review & Design. *J. Mod. Process. Manuf. Prod.*, 10(1), 31-50. (ISC index)

2020

2020_Journal :

- Mahmoodi, S., Hassan, D. A., Hojjati-Najafabadi, A., Li, W., Liao, L., **Moshayedi, A. J.**, Khajavi, M. N. (2020). Quality enhancement of copper oxide thin film synthesized under elevated gravity acceleration by two-axis spin coating. *Ceramics International*, 46(6), 7421-7429. (SCI=Z1,SJR=Q1, 0.92 Score)
- **Moshayedi, A. J.**, Kazemi, E., Tabatabaei, M., & Liao, L. (2020). Brief modeling equation for metal-oxide; TGS type gas sensors. *Filomat*, 34(15), 4997-5008. (SCI=Z4,SJR=Q2, 0.37 Score)

2020_Journal Other Index_2020 :

- **Moshayedi, A. J.**, Gheibollahi, M., & Liao, L. (2020). The quadrotor dynamic modeling and study of meta-heuristic algorithms performance on optimization of PID controller index to control angles and tracking the route. *IAES International Journal of Robotics and Automation*, 9(4), 256

2019_Conference : EI index

- **Moshayedi, A. J.**, Abbasi, A., Liao, L., & Li, S. (2019). *Path planning and trajectory tracking of a mobile robot using bio-inspired optimization algorithms and PID control*. Paper presented at the 2019 IEEE International Conference on Computational Intelligence and Virtual Environments for Measurement Systems and Applications (CIVEMSA). (IEEE conference , EI index) .
- **Moshayedi, A. J.**, Chen, Z.-Y., Liao, L., & Li, S. (2019). *Portable image based moon date detection and declaration: System and Algorithm Code Sign*. Paper presented at the 2019 IEEE International Conference on Computational Intelligence and Virtual Environments for Measurement Systems and Applications (CIVEMSA). (IEEE conference , EI index) .
- **Moshayedi, A. J.**, Chen, Z., Liao, L., & Li, S. (2019). *Kinect based virtual referee for table tennis game: TTV (Table Tennis Var System)*. Paper presented at the 2019 6th international conference on information science and control engineering (ICISCE). (IEEE conference , EI index) .
- **Moshayedi, A. J.**, Jinsong, L., & Liao, L. (2019). AGV (automated guided vehicle) robot: Mission and obstacles in design and performance. *Journal of Simulation and Analysis of Novel Technologies in Mechanical Engineering*, 12(4), 5-18. (IEEE conference , EI index) .
- **Moshayedi, A. J.**, Roy, A. S., Liao, L., & Li, S. (2019). *Raspberry Pi SCADA zonal based system for agricultural plant monitoring*. Paper presented at the 2019 6th International Conference on Information Science and Control Engineering (ICISCE). (IEEE conference , EI index) .

2019_Journal Other Index:

- **Moshayedi, A. J.**, Agda, A. M., & Arabzadeh, M. (2019). *Designing and implementation a simple algorithm considering the maximum audio frequency of persian vocabulary in order to robot speech control based on arduino*. Paper presented at the Fundamental Research in Electrical Engineering: The Selected Papers of The First International Conference on Fundamental Research in Electrical Engineering.
- **Moshayedi, A. J.**, Fard, S. S., Liao, L., & Eftekhari, S. A. (2019). Design and development of pipe inspection robot meant for resizable pipe lines. *Int. J. Robot. Control*, 2(1), 25.
- **Moshayedi, A. J.**, Hosseini, M. S., & Rezaee, F. (2019). WiFi based massager device with NodeMCU through arduino interpreter. *Journal of Simulation and Analysis of Novel Technologies in Mechanical Engineering*, 11(1), 73-79. (ISC)
- **Moshayedi, A. J.**, Roy, A. S., & Liao, L. (2019). PID Tuning Method on AGV (automated guided vehicle) Industrial Robot. *Journal of Simulation and Analysis of Novel Technologies in Mechanical Engineering*, 12(4), 53-66. (ISC)
- Abbasi, A., & **Moshayedi, A. J.** (2018). Trajectory tracking of two-wheeled mobile robots, using LQR optimal control method, based on computational model of KHEPERA IV. *Journal of Simulation and Analysis of Novel Technologies in Mechanical Engineering*, 10(3), 41-50. (ISC)

2018

2018_Conference : EI index

- **Moshayedi, A. J.** & Gharpure, D. (2017). *Evaluation of bio inspired Mokhtar: Odor localization system*. Paper presented at the 2017 18th international carpathian control conference (ICCC). (IEEE conference , EI index) .
- Geibollahi, M., & **Moshayedi, A. J.** (2018). Dynamic Modeling, Assembly and implementing Quadrotor UAV Using PID Controller. *Journal of Simulation and Analysis of Novel Technologies in Mechanical Engineering*, 11(1), 15-22. (ISC)

2018_Before

- Esfahani, O. T., & **Moshayedi, A. J** (2015). Design and development of Arduino healthcare tracker system for Alzheimer patients. *International Journal of Innovative Technology and Exploring Engineering (IJITEE)*, 5(4), 12-16.
- Esfahani, O. T., & **Moshayedi, A. J** (2014). Accuracy of the Positioning Systems for the Tracking of Alzheimer's Patients-A Review. *International Journal of Applied Electronics in Physics & Robotics*, 2(2), 10-16.
- Kukade, M., **Moshayedi, A. J**, & Gharpure, D. (2014). Electronic-nose (E-nose) for recognition of Cardamom, Nutmeg and Clove oil odor. *Electron. Its Interdiscip. Appl.(NCAEIA-2014)*.
- **Moshayedi, A. J**, & Gharpure, D. (2014). *Implementing breath to improve response of gas sensors for leak detection in plume tracker robots*. Paper presented at the Proceedings of the Third International Conference on Soft Computing for Problem Solving: SocProS 2013, Volume 2.
- **Moshayedi, A. J**, & Gharpure, D. (2014). Review on: odor localization robot aspect and obstacles. *Int. J. Mech. Eng. Robot*, 2, 7-19.
- **Moshayedi, A. J**, Ahmadi, F., & Gharpure, D. C. (2013). Utilizing the Job Expanding Algorithm in Mokhtar Plume Tracker. *International Journal of Applied Electronics in Physics & Robotics*, 1(2), 1-2.
- **Moshayedi, A. J**, & Gharpure, D. C. (2013b). Path and Position Monitoring Tool for Indoor Robot Application. *International Journal of Applied Electronics in Physics and Robotics*, 1(1), 10.
- **Moshayedi, A. J**, Gharpure, D. C., & Shaligram, A. D. (2013). Design and Development Of MOKHTAR Wind Tracker. *International Journal of Soft Computing and Engineering (IJSCE)*, 167-173. (IEEE conference , EI index) .
- **Moshayedi, A. J**, Toudeshki, A., & Gharpure, D. C. (2013). *Mathematical modeling for SnO 2 gas sensor based on second-order response*. Paper presented at the 2013 IEEE Symposium on Industrial Electronics & Applications. (IEEE conference , EI index) .
- Yunusa Ali, S., Ramli, A. R., Ahmad, S. A., Toudeshki, A., & **Moshayedi, A. J**. (2013). A New Mathematical Model for Mapping Indoor Environment.
- **Moshayedi, A. J**, & Gharpure, D. (2012a). *Development of position monitoring system for studying performance of wind tracking algorithms*. Paper presented at the ROBOTIK 2012; 7th German Conference on Robotics. (IEEE conference , EI index) .
- **Moshayedi, A. J**, & Gharpure, D. (2012b). *Priority based algorithm for Plume tracking Robot*. Paper presented at the 2012 1st International Symposium on Physics and Technology of Sensors (ISPTS-1). (IEEE conference , EI index) .
- **Moshayedi, A. J**, Shingade, A., & Gharpure, D. (2012). Development of E nose for inspection of spices.
- Moshayedi, A. J., Singh, P. K., & Bodas, D. D. Low Cost analyzer Solutions for Electrical Management System by Matlab software base on web base SCADA system.
- Hashemi, S. R., & **Moshayedi, A. J** (2011). LAB View Based Smart Washing Machine Analyzer For Energy Consumption Features.
- **Moshayedi, A. J**, & Gharpure, D. (2011). *Design and development of wind tracker*. Paper presented at the 2011 IEEE International Conference on Computer Applications and Industrial Electronics (ICCAIE). (IEEE conference , EI index)