



# Jalal Javadi Moghaddam

Mechanical Engineering

## PROFILE

- Name: Jalal
- Sure Name: Javadi Moghaddam

## CONTACT

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- [https://scholar.google.com/citations?hl=en&user=w7nsBy\\_0AAAAJ](https://scholar.google.com/citations?hl=en&user=w7nsBy_0AAAAJ)

## SKILLS

mechanical engineering  
apply design, control,  
modeling, artificial  
intelligence, mechatronic,  
robotic.

## Software

Ansys, Solidworks, Comsol,  
Abaques, Microsoft Office,  
Matlab, Catia, Sap2000,  
Etabs.

## EDUCATION

- University of Guilan **Phd**  
Applied Designing, Control Robotic
- University of Guilan **Master**  
Applied Designing, Control Optimization
- Azad University South Branch **Bachelor**  
Solid Designing

## LANGUAGES

Persian

English

## List of Projects:

- Research plan for optimization and control of car suspension system - University of Guilan
- Research project of setting up and installing a composite production line - University of Guilan
- Design of an intelligent control system to maintain and increase the efficiency of the axial flow compressor
- Carrying out a financial management project to determine the optimal model of capital allocation using Markowitz model for Sepah Bank
- University of Guilan Research project entitled Designing an optimal control system to repel vibration and disturbance on aircraft fins by piezoelectric as a sensor and actuator
- Design and manufacture of composite sheet vibration damping device by sensor and piezoelectric actuator
- Design and manufacture of climate control and greenhouse automation in Agricultural Engineering and Technology Research Institute.
- Modification of wind resistant octagonal greenhouse structure design.
- Upgrading a conventional milling machine to a CNC milling machine. Islamic Azad University, Damavand Branch.
- Conceptual design of three-axis welding robot. Islamic Azad University, Damavand Branch.
- Conceptual design of five-axis milling robot. Islamic Azad University, Damavand Branch.
- Design and construction of underwater scanning robot. University of Guilan.
- Design and construction of underwater scanning robot control system. University of Guilan.
- Optimization of position and location of piezoelectric sensors on composite sheets to optimize the damping speed of sheet vibrations
- Designing the mechanism and making the groove of the milling machine.
- Design and optimization of connection points in the trusses of arched sheds.
- Technical analysis of greenhouse structures suitable for tropical regions and providing suitable greenhouse types for different regions of Hormozgan province
- Development of a roadmap for the development of greenhouses in Hormozgan province with a tropical climate.
- Review and evaluation of study projects of greenhouse towns in Iran.
- Design and construction of a climate change monitoring system to investigate and analyze the mentioned conditions inside and outside the canopies installed in the gardens of temperate and semi-cold regions
- Design and construction of a climate change monitoring system to investigate and analyze the mentioned conditions inside and outside the canopies installed in the gardens.
- Design of structures and canopy cover for horticultural crops according to the type of product, the type of protection required and the climate of the region.
- Design and analysis of structures and canopy cover for specific products.
- Design and analysis of structures and canopy cover for tropical and subtropical products.
- Design and manufacture of greenhouse environmental control device with the ability to control hot air heaters and ventilation openings.
- Fluid dynamics modeling and redesign of arched greenhouse design.

- Design and optimization of wind-resistant octagonal greenhouse design.

Reference Link: [https://scientometric.areeo.ac.ir/Jalal\\_JavadiMoghaddam](https://scientometric.areeo.ac.ir/Jalal_JavadiMoghaddam).

### Papers ISI, SCOPUS and google Scholar:

	Authors	Title	Publication	V	N	P	Year	Publisher
1	Bagheri, Ahmad; Moghaddam, Jalal Javadi;	Simulation and tracking control based on neural-network strategy and sliding-mode control for underwater remotely operated vehicle	Neurocomputing	72	9-Jul	1934-1950	2009	Elsevier
2	Bagheri, Ahmad; Moghaddam, Jalal Javadi;	Decoupled adaptive neuro-fuzzy (DANF) sliding mode control system for a Lorenz chaotic problem	Expert systems with applications	36	3	6062-6068	2009	Pergamon
3	Moghaddam, J Javadi; Farahani, Mehrdad H; Amanifard, Nima;	A neural network-based sliding-mode control for rotating stall and surge in axial compressors	Applied Soft Computing	11	1	1036-1043	2011	Elsevier
4	Moghaddam, J Javadi; Madani, M;	A decoupled adaptive neuro-fuzzy sliding mode control system to control rotating stall and surge in axial compressors	Expert Systems with Applications	38	4	4490-4496	2011	Pergamon
5	Moghaddam, Jalal Javadi; Bagheri, Ahmad;	A novel stable deviation quantum-behaved particle swarm optimization to optimal piezoelectric actuator and sensor location for active vibration control	Proceedings of the Institution of Mechanical Engineers, Part I: Journal of Systems and Control Engineering	229	6	485-494	2015	SAGE Publications UK: London, England
6	Moghaddam, Jalal Javadi; Bagheri, Ahmad;	Suppressing vibration in a functionally graded material plate using genetic algorithm particle swarm optimization and sliding mode control system	Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering	230	2	120-133	2016	SAGE Publications UK: London, England
7	Moghaddam, Jalal Javadi; Bagheri, Ahmad;	Suppressing vibration in a multilayers composite material plate using quantum-behaved particle swarm optimization and sliding mode control system	Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering	229	11	2095-2105	2015	SAGE Publications UK: London, England
8	Nobakht, Marjan; Moghaddam, Jalal Javadi; Bagheri, Ahmad;	Presenting a New Strategy to Extract Data Clustering Heartbeat Samples by Using Discrete Wavelet Transform	European Online Journal of Natural and Social Sciences: Proceedings	2	3	pp. 3419-3428	2015	

9	Javadi-Moghaddam, J; Bagheri, Ahmad;	An adaptive neuro-fuzzy sliding mode based genetic algorithm control system for under water remotely operated vehicle	Expert Systems with Applications	37	1	647-660	2010	Pergamon
10	Javadi Moghaddam, Jalal; Mirzaei, Mostafa; Madani, Masood; Norouzi, Mohammadreza; Khodarahmi, Atena;	Adaptive neuro fuzzy sliding mode based genetic algorithm control system to control of a pH neutralization process	Journal of Physical & Theoretical Chemistry	11	4	215-225	2015	
11	Javadi Moghaddam, Jalal; Bagheri, Ahmad;	A novel artificial intelligent control system to suppress the vibration of a FGM Plate	Systems Science & Control Engineering	3	1	240-252	2015	Taylor & Francis
12	Javadi Moghaddam, J; Bagheri, A;	Suppressing Vibration In A Plate Using Particle Swarm Optimization	AUT Journal of Modeling and Simulation	45	2	22-Nov	2015	Amirkabir University of Technology
13	Hosseini, Maryam; Javadi Moghaddam, Jalal;	Determination of water quality parameters and nutrient level with an Adaptive Neuro-Fuzzy Inference System	Journal of Physical & Theoretical Chemistry	11	1	29-37	2014	
14	Moghaddam, Jalal Javadi; Bagheri, Ahmad;	Engineers, Part E: Journal of Process						
15	Shahbaz, Parsinejad; Ahmad, Bagheri; Atani Reza, Ebrahimi; Moghaddam Jalal, Javadi;	Stock market forecasting using artificial neural networks	European Online Journal of Natural and Social Sciences: Proceedings	2	3	pp. 2404-2411	2014	
16	Bagheri, Ahmad;	Design an Inteligent Control System to Supress the Vibration of Simply Supported FGM Shell	Journal of Intelligent Automation Systems				2014	Shahrood University of Technology
17	Abd Wahab, Mohd Helmy; Abdallah, Sherief; Abe, Hidenao; Adda, Mehdi; Adjeroh, Donald; Agarwal, Basant; Alpar, Orcan; Alqithami, Saad; Alsadhan, Nasser; An, Aijun;	2016 Reviewer Thanks						
18	Rostami, Meysam; Javاديمoghaddam, Jalal; Bagheri, Ahmad;	Control of underwater robot using ANFIS control system	Journal of Solid and Fluid Mechanics	3	4	33-46	2014	Shahrood University of Technology
19	Bagheri, A; Sadri, A; Javadi Moghaddam, J;	ACTIVE VIBRATION CONTROL OF LAMINATED PLATE USING PIEZOELECTRIC SENSORS AND ACTUATORS	Sharif Journal of Mechanical Engineering	32	1	9-Mar	2016	Sharif University of Technology
20	Potter, Ashley;	Modern Control Systems and Engineering					2017	
21	Moghaddam, J Javadi;	The effect of turbulence on natural ventilation of a proposed octagonal greenhouse in a transient flow	International Journal of Environmental Science and Technology	18	8	2181-2196	2021	Springer Berlin Heidelberg

22	Javadi Moghaddam, J; Bagheri, A;	Design an intelligent control system to suppress the vibration of simply supported FGM shell	Journal of Intelligent Automation Systems, Article in press, Corrected Proot Available online from us February						2014
23	Javadi Moghaddam, J; Bagheri, A;	Supressing vibration in a functionally graded material plate using geneticalgorithm particle swarm optimizationand sliding mode control system	J Process Mechanical Engineering			14-Jan			2014
24	Bagheri, A;	J. Javadi moghaddam,"An adaptive neuro-fuzzy sliding mode based genetic algorithm control system for under water remotely operated vehicle"	Expert Systems with Applications, Expert Systems with Applications	37		647-660			2010
25	Javadi Moghaddam, Jalal; Ozlati, Sayid; Zarei, Ghasem; MOMENI, Davood; Azadshahraki, Farzad;	Structural Design and Simulation of Octogenel Greenhouse against Different Loads	Agricultural Mechanization and Systems Research	21	74	203-218		2020	Agricultural Engineering Research Institute
26	Masouleh, Seyedeh Somayyeh Shafiei; Moghaddam, Jalal Javadi;	Evaluation of open-pollinated offspring in Cyclamen persicum using vegetative phenology models in a primitive breeding population	Ornamental Horticulture	27		49-59		2020	Sociedade Brasileira de Floricultura e Plantas Ornamentais
27	JAVADI, MOGHADDAM J; Ozlati, S; ZAREI, GH; MOMENI, D; AZADSHAHRAKI, F;	Ventilation and Cooling Modeling and Lyout of Fans, Pads and Vents of an Octagonal Greenhouse							JOURNAL OF AGRICULTURAL MACHINERY
28	Javadi Moghaddam, Jalal; Zarei, Ghasem;	Olive Irrigation Management	Water Management in Agriculture	5	1	24-Nov		2018	Iranian Irrigation and Drainage Association
29	Moghaddam, Jalal Javadi; Momeni, Davood; Zarei, Ghasem;	Application of topology optimization method for the gothic greenhouse design	World Journal of Engineering					2021	Emerald Publishing Limited
30	Moghaddam, Jalal Javadi; Zarei, Ghasem; Momeni, Davood; Faridi, Hamideh;	Non-linear control model for use in greenhouse climate control systems	Research in Agricultural Engineering	68	1	17-Sep		2022	
31	Masouleh, Seyedeh Somayyeh Shafiei; Moghaddam, Jalal Javadi;	Avaliação da prole de polinização aberta em Cyclamen persicum usando modelos de fenologia vegetativa em uma população reprodutiva primitiva	Ornamental Horticulture	27		49-59		2020	Sociedade Brasileira de Floricultura e Plantas Ornamentais
32	Javadi Moghaddam, J; Ozlati, S; Zarei, Gh; Momeni, D; Azadshahraki, Farzad;	Ventilation and Cooling Modeling and Lyout of Fans, Pads and Vents of an Octagonal Greenhouse						2021	Ferdowsi University of Mashhad

33	Javadi Moghaddam, J; Momeni, D; Zarei, Gh;	Thermal, ANFIS, and Polynomial Neural Network Models for Predicting Environmental Variables in an Arch Greenhouse	Journal of Agricultural Science and Technology	24	3	617-633	2022	Tehran, Tarbiat Modarres University
34	Javadi Moghaddam, J; Zarei, GH; Momeni, D; Faridi, H;	Non-linear control model for use in greenhouse climate control systems. Res	Agr. Eng		68	00-00	2022	

### Google Scholar Link:

[https://scholar.google.com/citations?user=tNs8y\\_0AAAAAJ&hl=en](https://scholar.google.com/citations?user=tNs8y_0AAAAAJ&hl=en)

### Chapter Book:

1. Modern Control Systems and Engineering, Editor: Ashley Potter, Published by The English Press, 5 Penn Plaza, 19th Floor, Ne: Compilation Books.
2. CHAPTER TITLE: Digital Agriculture in Iran: Challenges and Opportunities, BOOK TITLE: Digital Agriculture, Methods, and Applications. IntechOpen Rijeka: Janeza Trdine 9, 51000 Rijeka, Croatia London: 5 Princes Gate Court, London, SW7 2QJ, UK, +44/20-80895702 www.intechopen.com

### Author Book:

Intelligent control and monitoring of complex dynamic systems. The central print publications, National university of Guilan (2012). Authors: A. Bagheri, J. Javadi Moghaddam

### As a Reviewer:

More than 250 article reviews.