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<https://scholar.google.com/citations?user=fnZvyb4AAAAJ&hl=en>

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UNIVERSITY SERVICES

2017 – 2018

DEPUTY OF RESEARCH AND EDUCATION, FACULTY OF MECHANICAL ENGINEERING, UNIVERSITY OF GUILAN

2015 – 2017

HEAD OF MECHANICAL ENGINEERING DEPARTMENT, UNIVERSITY OF GUILAN

2008 – 2009

SABBATICAL LEAVING PROGRAM, NATIONAL TECHNICAL UNIVERSITY OF ATHENS (NTUA), ATHENS, GREECE.

RESEACH EXPERIENCE

2014 – 2018

ASSOCIATE PROFESSOR, FACULTY OF MECHANICAL ENGINEERING, UNIVERSITY OF GUILAN, IRAN

RESEARCH INTERESTS: Evolutionary Algorithms, Optimization, Game theory, Genetic Programming, Data-Driven engineering design, Neural Networks, GMDH, Topology optimization.

2009 – 2014

ASSISTANT PROFESSOR, FACULTY OF MECHANICAL ENGINEERING, UNIVERSITY OF GUILAN

2009 – 2018

LECTURER, UNIVERSITY OF GUILAN

Teaching: Dynamics, Automatic Control, Advanced Control, Soft computing, Game theory, Evolutionary Algorithms, Optimization, Advanced vibration.

ACADEMIC QUALIFICATIONS

11 / 2009

PhD in Mechanical Engineering, UNIVERSITY OF GUILAN

PhD Thesis: Robust Pareto multi-objective controller design for system with probabilistic uncertainties.

01 / 2004

MSc in Mechanical Engineering, IRANIAN UNIVERSITY OF SCIENCE AND TECHNOLOGY (IUST), IRAN

MSc Project: Optimization and modelling of engine mount using Genetic algorithm and GMDH-type neural network

10 / 2001

BSc in Mechanical Engineering, University of Guilan, IRAN

HONORS AND AWARDS

International Federation of Automatic Control (IFAC) - Journal Award (2011)

The Journal of Engineering Applications of AI Paper Prize is awarded for outstanding papers on theory or practice of artificial intelligence published in Journal of Engineering Applications of AI. At

each IFAC World Congress the prize is awarded to the authors of two selected papers published in the journal in the three years preceding the Congress.

Outstanding Research Award (2015)

Awarded by University of Guilan, Vice-Chancellor's Office for Research.

Outstanding Teaching Award (2011)

Awarded by University of Guilan, Faculty of Engineering, University of Guilan.

The Best Conference Paper Prize in IWIM (2007)

For paper entitled: Pareto Genetic Design of GMDH-type Neural Networks for Nonlinear Systems

RESEARCH AND GRANTS

Evolutionary and non-evolutionary Methods of optimization in Mechanical

Granted by Guilan University

Application of Soft Computing to the Modelling of Time-series Behaviour of Complex Processes

Granted by Finance and Programme Organization

SERVICES

Ad-hoc Reviewer

Engineering Application of Artificial Intelligence
Engineering Optimization
Neural Computing with Applications
Swarm and Evolutionary Computation
Structural and Multidisciplinary optimization
Transactions of the Institute of Measurement and Control

Associate Editor

Journal of Modares Mechanical Engineering

Supervision of master and PhD students

Supervision more than 60-project in MSc and 8-PhD-thesis

PUBLICATIONS

H. Assimi, **A. Jamali**, N. Nariman-zadeh (2018) Sizing and topology optimization of truss structures using genetic programming, Swarm and Evolutionary Computation, 37: 90-103.

A. Asgharnia, R. Shahnazi, **A. Jamali** (2018) Performance and robustness of optimal fractional fuzzy PID controllers for pitch control of a wind turbine using chaotic optimization algorithms, ISA Transactions, 79: 27-44.

A. Taherkhani, A. Basti, N. Nariman-zadeh and **A. Jamali** (2018) Achieving maximum dimensional accuracy and surface quality at the shortest possible time in single-point incremental forming via multi-objective optimization, Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, DOI: 10.1177/0954405418755822.

H. Assimi, **A. Jamali** (2018) A hybrid algorithm coupling genetic programming and Nelder–Mead for topology and size optimization of trusses with static and dynamic constraints, *Expert Systems with Applications*, 95 (1): 127-141.

B. Ahmadi, N. Nariman-zadeh, **A. Jamali** (2017) Path synthesis of four-bar mechanisms using synergy of polynomial neural network and Stackelberg game theory", *Engineering Optimization*, DOI: 10.1080/0305215X.2016.1218641.

A. Mehrvar, A. Basti, **A. Jamali** (2017) Optimization of electrochemical machining process parameters: Combining response surface methodology and differential evolution algorithm, *Journal of Process Mechanical Engineering*, 231(6): 1114-1126

I. GHolaminezhad, H. Assimi, **A. Jamali**, D. Ashouri (2017) Uncertainty quantification and robust modeling of selective laser melting process using stochastic multi-objective approach, *International Journal of Advanced Manufacturing Technology*, 86(5–8): 1425–1441.

M. Salehpour, **A. Jamali**, A. Bagheri, N. Nariman-zadeh (2017) Optimum sliding mode controller design based on skyhook model for nonlinear vehicle vibration model, *IJAE*, 7(4): 2537-2550.

M.Salehpour, **A. Jamali**, A. Bagheri, N. Nariman-zadeh (2017) A new adaptive differential evolution optimization algorithm based on fuzzy inference system, *Engineering Science and Technology, an International Journal*, 20(2): 587-597.

A. Jamali, H Babaei, N Nariman-Zadeh, SH Ashraf Talesh, T. Mirzababaie Mostofi (2017) Multi-objective optimum design of ANFIS for modelling and prediction of deformation of thin plates subjected to hydrodynamic impact loading, *Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials Design and Applications*, <https://doi.org/10.1177/1464420716660332>

I. Gholaminezhad, **A. Jamali**, H. Assimi (2017) Multi-objective reliability-based robust design optimization of robot gripper mechanism with probabilistically uncertain parameters, *Neural computing and applications*, DOI 10.1007/s00521-016-2392-7.

A. Chaibakhsh, N. Ensansifat, **A. Jamali**, R. Kouhikamali, H. Najafi (2016) Crude oil direct fired furnace model, *Applied Thermal Engineering*, 83: 57-70

I. Gholaminezhad, **A. Jamali** (2016) A Multi-objective Differential Evolution Approach based on ϵ -elimination Uniform-Diversity for Mechanisms Design, *Structural and Multidisciplinary Optimization*, 52(5), 861-877.

M. Masoumnezhad, **A. Jamali**, and N. Nariman-zadeh (2015) Robust GMDH-type neural network with unscented Kalman filter for non-linear systems, *Transactions of the Institute of Measurement and Control*, 38(8): 992-1003.

Saeb M. Besarati, Philip D. Myers, David C. Covey, **A. Jamali** (2015) Modeling friction factor in pipeline flow using a GMDH-type neural network, *Cogent Engineering*, 2(1).

A. Jamali, E. Khaleghi, I. Gholaminezhad, N. Nariman-zadeh, A. Jamal-omidi, (2015) Multi-objective genetic programming approach for robust modeling of complex manufacturing processes having probabilistic uncertainty in experimental data, *Journal of Intelligent Manufacturing*, 28(1): 149-163.

S. Porkhial, M. Salehpour, H. Ashraf, **A. Jamali** (2015) Modeling and prediction of geothermal reservoir temperature behavior using evolutionary design of neural networks, *Geothermics*, 53: 320-327.

M. Masoumnezhad, **A. Jamali**, N. Nariman-zadeh (2014) Optimal Design of Symmetrical/Asymmetrical Sigma-Point Kalman Filter Using Genetic Algorithms, Transactions of the Institute of Measurement and Control, 37(3):425-432.

V. Majdabadi-Farahani, M. Hanif, I. Gholaminezhad, **A. Jamali**, N. Nariman-Zadeh (2014) Multi-objective optimal design of on-line PID controller using model predictive control based on GMDH-type neural networks, Connection Science, 26(4): 349-365.

A. Jamali, H. Shams, M. Fasihozaman (2014) Pareto multi-objective optimum design of suspension system of vehicle under random road excitations, IMechE, Part D, 228(3): 282-293.

A. Jamali, E. Khaleghi, I. Gholaminezhad, N. Nariman-zadeh (2014) Modeling and prediction of complex nonlinear processes by using Pareto multi-objective genetic programming, International Journal of System Science, DOI: 10.1080/00207721.2014.945983.

A. Jamali, A., M. Salehpour, N. Nariman-zadeh (2013) Robust Pareto active suspension design for vehicle vibration model with probabilistic uncertain parameters, Multibody Syst Dyn 30:265–285.

A. Jamali, S. J. Motevalli, N. Nariman-zadeh (2013) Extracting fuzzy rules for modeling of complex processes by using neural networks, Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 227(12): 2861-2869.

A. Jamali, Bahman Ahmadi, Mehdi Ghamati, Nader Nariman-zadeh (2013) Reliability-based optimal controller design for systems with probabilistic uncertain parameters using fuzzy limit state function, Journal of Vibration and Control, 21(7): 1413-1429.

A. Jamali, M. Ghamati, B. Ahmadi, N. Nariman-zadeh (2013) Probability of failure for uncertain control systems using neural networks and multi-objective uniform-diversity genetic algorithms (MUGA), Engineering Applications of Artificial Intelligence, 26(2): 714-723.

H. Abed, K. Atashkari, A. Niazmehr, **A. Jamali** (2013) Thermodynamic optimization of combined power and refrigeration cycle using binary organic working fluid, International Journal of Refrigeration, 36(8).

Shokuhi-Rad, **A. Jamali**, M. Naghashzadegan, N. Nariman-zadeh, A. Hajiloo (2012) Optimum Pareto Design of Non-linear Predictive Control with Multi-Design Variables for PEM Fuel Cell, International Journal of Hydrogen Energy, Volume 37, Issue 15, August 2012, Pages 11244-11254

M. J. Mahmoodabadi, A. Bagheri, N. Nariman-zadeh, **A. Jamali** (2012) A new optimization algorithm based on a combination of particle swarm optimization, convergence and divergence operators for single objective and multi-objective problems, Engineering optimization, 44(10): 1167-1186.

M. Salehpour, **A. Jamali**, N. Nariman-zadeh (2011) Optimal Selection of Active Suspension Parameters Using Artificial Intelligence, International Journal of Automotive Engineering, 1 (4), 244-255.

S.M. Besarati, K. Atashkari, A. Hajiloo, N. Nariman-zadeh, **A. Jamali** (2010) Multi-objective thermodynamic optimization of combined Brayton and inverse Brayton cycles using genetic algorithms, Energy Conversion and Management, 51(1): 212-217,

A. Jamali, A. Hajiloo, N. Nariman-zadeh (2010) Reliability-based robust Pareto design of linear state feedback controllers using a multi-objective uniform-diversity genetic algorithm (MUGA), Expert Systems with Applications, 37(1): 401-413.

N. Nariman-Zadeh, M. Salehpour, **A. Jamali**, E. Haghgoo (2010) Pareto optimization of a five-degree of freedom vehicle vibration model using a multi-objective uniform-diversity genetic algorithm (MUGA), *Engineering Applications of Artificial Intelligence*.

A. Jamali, N. Nariman-zadeh, A. Darvizeh, A. Masoumi, S. Hamrang (2009) Multi-objective evolutionary optimization of polynomial neural networks for modelling and prediction of explosive cutting process, *Engineering Applications of Artificial Intelligence*, 22(4-5): 676-687.

A. Jamali, J. Marzbanrad (2009) Design of Anfis Networks Using Hybrid Genetic and SVD Methods for Modelling and Prediction of Rubber Engine Mount Stiffness", *International Journal of Automotive Technology*, 10(2): 167-174.

N. Nariman-zadeh, M E Fellzi, **A. Jamali**, A Ganji (2008) Pareto Optimal Synthesis of Four-bar Mechanisms for Path Generation, (with), *Mechanism and Machine Theory*, 44(1): 180-191.

K Atashkari, N. Nariman-zadeh, M. Gölcü, A. Khalkhali, **A. Jamali** (2007) Modelling and multi-objective optimization of a variable valve-timing spark-ignition engine using polynomial neural networks and evolutionary algorithms, *Energy Conversion and Management*, 48(3), 1029-1041.

A.Hajiloo, N. Nariman-zadeh, **A. Jamali** (2007) Frequency-based Reliability Pareto Optimum Design of PID Controllers for Systems with Probabilistic Uncertainty, *Proceedings of the Institution of Mechanical Engineers, Part I, Journal of Systems and Control Engineering*, 221(8).

N. Nariman-zadeh, A. darvizeh, **A. Jamali** (2006) Pareto Optimization of Energy Absorption of Square Aluminium Columns Using Multi-objective Genetic Algorithms (2006) *Journal of Engineering Manufacture, Proceedings of the Institution of Mechanical Engineers Part B*, 220(2): 213-224.

K. Atashkari, N. Nariman-zadeh, **A. Jamali**, A. Pilechi, X. Yao (2005) Inverse Modelling of Multi-objective Thermodynamically Optimized Turbojet Engines using GMDH-type Neural Networks and Evolutionary Algorithms, *Journal of Engineering Optimization*, 37(5): 437-462.

N. Nariman-zadeh, A. Darvizeh, **A. Jamali**, A. Moeini (2005) Evolutionary Design of Generalized Polynomial Neural Networks for Modelling and Prediction of Explosive Forming Process (with), *Journal of Material Processing and Technology*, 164-165: 1561-1571.

K. Atashkari, N. Nariman-zadeh. A. Pilechi, **A. Jamali**, X. Yao (2005) Thermodynamic Pareto Optimization of Turbojet Engines using Multi-objective Genetic Algorithms, *International Journal of Thermal Sciences*, 44(11):1061-1071.