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**General Information** 

Full Name: Ali Sadollah

**Date of Birth:** 25<sup>th</sup> May 1984 **Marital Status**: Married

Nationality: Iran Sex: Male

**Current Position:** Assistant Professor, University of Science and Culture, Tehran, Iran

**Permanent Address:** #24, 6<sup>th</sup> Floor, 5<sup>th</sup> Ave, Kashani St., Tehran, Iran (PC:14839-36391)

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# **Qualification Background**

10/2018 ~ Present Assistant Professor, School of Mechanical Engineering, University of

Science and Culture, Ashrafi Esfehani Blvd., Tehran, Iran

Main Research Topic: Engineering Optimization

06/2017 ~ 11/2018 Post-Doctoral Research Fellow, School of Mechanical Engineering, Sharif

University of Technology, Azadi Avenue, Tehran, Iran

Main Research Topic: Machine learning approaches for smart systems

Supervisor: Professor Hassan Sayyaadi

02/2016 ~ 02/2017 Post-Doctoral Research Fellow, School of Electrical and Electronic

Engineering (EEE), Nanyang Technological University (NTU), 639798,

Singapore

Main Research Topic: Distributed adaptive urban traffic signal control using

optimization and machine learning approaches

**Supervisor:** A/Professor Rong Su

09/2013 ~ 09/2015 Post-Doctoral Research Fellow, School of Civil Engineering, Faculty of

Engineering, Korea University (KU), 136-713, Seoul, South Korea.

Main Research Topic: Optimization of water distribution systems using

metaheuristics

**Supervisor:** Professor Joong Hoon Kim

08/2010 ~ 08/2013 PhD, Department of Mechanical Engineering, Faculty of Engineering,

University of Malaya (UM), 50603, Kuala Lumpur, Malaysia.

Thesis Title: Development and Applications of Metaheuristic Algorithms in

Engineering Design and Structural Optimization

Main Research Topic: Computational Mechanics and Computational

Intelligence used in engineering structures

Supervisors: Professor Ardeshir Bahreininejad, Professor Mohd Hamdi, and

Associate Professor Judha Purbolaksono

09/2007 ~ 08/2010 Master of Science, Mechanical Engineering, Applied Mechanics

University of Semnan, Semnan, Iran

Main Research Topic: Composite materials

**Supervisor**: Professor Abdolhossein Fereidoon, GPA: 16.88 out of 20

09/2002 ~ 08/2007 Bachelor of Science, Mechanical Engineering, Mechanics of Solid

Islamic Azad University, Semnan branch, Semnan, Iran,

GPA: 16.56 out of 20

09/1998 ~ 08/2002 High School Diplomas in Mathematics and Physics (First Class)

Mohammad High School, Tehran, Iran, GPA: 17.53 out of 20

# **Major Research Interests**

My hobbies are my professions. I do what I enjoy and enjoy what I do. I take all the things I do equally seriously and find them equally enjoyable. However, for scheduling purposes, I shifted my main concentration along the way, which now seems to remain on metaheuristic algorithms and computational sciences.

#### **Research Interests**

- Algorithm Development
- Optimization and Metaheuristics
- Swarm Intelligence: Theory and Applications
- Evolutionary Algorithms, Multi-Objective Optimization and Water Cycle Algorithm
- Soft Computing Methods
- Machine Learning & Data Mining (e.g., Clustering, Classification)
- Artificial Neural Networks
- Fuzzy Logic
- Computational Solid Mechanics
- Cold Roll Forming Process (Roller Design)

#### **Sport Interests**

My major field in sport is Track & Field (sprinting). I obtained the first and second prizes at university competitions in 200 meters in 2011 and 2012, respectively. However, I have involved with several sport activities such as soccer, martial arts, badminton. Furthermore, I am interested in the scientific aspects of sports. In general, I enjoy practicing and learning all types of sports and outdoor activities.

# **Publications & Research Activities**

# Published Papers (IF stands for Impact Factor)

#### 2011

1. A. Sadollah, A. Bahreininejad\*, "Optimum gradient material for functionally graded dental implant using metaheuristic algorithms". *Journal of the Mechanical Behavior of Biomedical Materials (SCIE journal)*, 4(7) (Oct. 2011) 1384-1395 (IF: 3.485, Q1).

#### 2012

- **2. A. Sadollah**, A. Bahreininejad\*, H. Eskandar, M. Hamdi, "Mine blast algorithm for optimization of truss structures with discrete variables", *Computers & Structures (SCI journal)*, 102-103 (July 2012) 49-63 (IF: 3.354, Q1).
- **3.** H. Eskandar, **A. Sadollah**, A. Bahreininejad\*, M. Hamdi, "Water cycle algorithm a novel metaheuristic optimization method for solving constrained engineering optimization problems", *Computers & Structures (SCI journal)*, 110-111 (Nov. 2012) 151-166 (Titled as Most Downloaded Articles in Computers & Structures) (IF: 3.354, Q1).
- **4. A. Sadollah**, A. Bahreininejad\*, "Optimization of die design using metaheuristic methods in cold forward extrusion process". *Neural Computing & Applications (SCIE journal)*, 21 (May 2012) 2071–2076 (May 2011) (IF: 4.664, Q1).

- **5. A. Sadollah**, M.N.H. Mohamed\*, A. Bahreininejad, "Optimum culture conditions for 1,3-Propanediol production from Crude Glycerol using metaheuristic algorithms", *Applied Mathematics & Information science (Scopus Indexed)*, 1(1) (Jan. 2013) 1-8 (IF: 1.232, Q3).
- **6. A. Sadollah**, A. Bahreininejad\*, H. Eskandar, M. Hamdi, "Mine Blast Algorithm: a new population based algorithm for solving constrained engineering optimization problems", *Applied Soft Computing (SCIE journal)*, 13 (May 2013) 2592-2612 (23<sup>rd</sup> out of 24<sup>th</sup> in Most Downloaded Articles in 2013) (IF: 4.873, Q1).
- **7.** H. Hemmatian, A. Fereidoon, **A. Sadollah**, A. Bahreininejad\*, "Optimization of laminate stacking sequence for minimizing weight and cost using elitist ant system optimization", *Advances in Engineering Software (SCIE journal)*, 57 (March 2013) 8-18 (IF: 4.194, Q1).
- **8. A. Sadollah**, A. Ghadimi, I.H. Metselaar, A. Bahreininejad\*, "Prediction and optimization of stability parameters for Titanium dioxide nanofluid using response surface methodology and artificial neural networks", *Science and Engineering of Composite Materials (SCIE journal)*, 20(4) (May 2013) 319-330 (IF: 0.705, Q3).

- **9. A. Sadollah**, A. Bahreininejad\*, H. Eskandar, M. Hamdi, "Optimum material gradient for functionally graded dental implant using particle swarm optimization" *Advanced Materials Research*, 647 (Jan. 2013) 30-36.
- **10.** H. Eskandar, **A. Sadollah**, A. Bahreininejad\*, "Weight optimization of truss structures using water cycle algorithm", *International Journal of Optimization in Civil Engineering* (Scientific Information Database & ISC Indexed), 3(1) (Jan. 2013) 115-129.

- **11. A. Sadollah**, A. Bahreininejad\*, M. Hamdi, J. Purbolaksono, "Optimum mechanical behavior of calcium phosphate cement/hydroxyl group functionalized multi-walled carbon nanotubes/bovine serum albumin composite using metaheuristic algorithms", *Neural Computing & Applications (SCIE journal)*, 24 (2014) 193-200 (IF: 4.664, Q1).
- **12.** H.M. Khanlou, **A. Sadollah**, B.C Ang, J.H. Kim\*, S. Talebian, A. Ghadimi, "Prediction and optimization of electrospinning parameters for polymethyl methacrylate nanofiber fabrication using response surface methodology and artificial neural networks", *Neural Computing & Applications (SCIE journal)*, 25(3-4) (Jan. 2014) 767-777 (IF: 4.664, Q1).
- **13. A. Sadollah**, H. Eskandar, J.H. Kim\*, "Geometry optimization of a cylindrical fin heat sink using mine blast algorithm", *International Journal of Advanced Manufacturing Technology (SCIE journal)*, 73(5-8) (May 2014) 795-804 (IF: 2.496, Q1).

- **14. A. Sadollah**, D.G. Yoo, J.H. Kim\*, "Improved mine blast algorithm for optimal cost design of water distribution systems", *Engineering Optimization (SCIE journal)*, 47(12) (2015) 1602-1618 (IF: 1.809, Q1).
- **15. A. Sadollah**, H. Eskandar, J.H. Kim\*, "Water cycle algorithm for solving constrained multi-objective problems", *Applied Soft Computing (SCIE journal)*, 27 (2015) 279-298 (IF: 4.873, Q1).
- **16. A. Sadollah**, H. Eskandar, A. Bahreininejad\*, J.H. Kim, "Water cycle algorithm for solving multi-objective optimization problems", *Soft Computing (SCIE journal)*, 19(9) (2015) 2587-2603 (IF: 2.784, Q2).
- **17. A. Sadollah**, H. Eskandar, A. Bahreininejad\*, J.H. Kim, "Water cycle, mine blast and improved mine blast algorithms for discrete sizing optimization of truss structures", *Computers & Structures (SCI journal)*, 149 (March 2015) 1-16 (<u>Titled as Most Cited Articles in Computers & Structures</u>) (IF: 3.354, Q1).
- **18. A. Sadollah**, H. Eskandar, A. Bahreininejad\*, J.H. Kim, "Water cycle algorithm with evaporation rate for solving constrained and unconstrained optimization problems", *Applied Soft Computing (SCIE journal)*, 30 (May 2015) 58-71 (IF: 4.873, Q1).

- **19. A. Sadollah**, H. Eskandar, D.G. Yoo, J.H. Kim\*, "Approximate solving of nonlinear ordinary differential equations using least square weight function and metaheuristic algorithms", *Engineering Applications of Artificial Intelligence (SCIE journal)*, 40 (April 2015) 117-132 (IF: 3.526, Q1).
- **20.** D.G. Yoo, H.M. Lee, **A. Sadollah**, J.H. Kim\*, "Optimal Pipe Size Design for Looped Irrigation Water Supply System using Harmony Search: Saemangeum Project Area", *The Scientific World Journal (Scopus Indexed)*, Vol. 2015, Article ID 651763 (2015) 1-10, DOI: http://dx.doi.org/ 10.1155/2015/651763.
- **21. A. Sadollah**, Y. Choi, D.G. Yoo, J.H. Kim\*, "Metaheuristic algorithms for approximate solution to ordinary differential equations of longitudinal fins having various profiles", *Applied Soft Computing (SCIE journal)*, 33 (Aug. 2015) 360-379 (IF: 4.873, Q1).
- **22.** D.G. Yoo, G. Chung, **A. Sadollah**, J.H. Kim\*, "Applications of network analysis and multi-objective genetic algorithm for selecting optimal water quality sensor locations in water distribution networks", *KSCE Journal of Civil Engineering (SCIE journal)*, 19(7) (Feb. 2015) 2333-2344 (IF: 1.428, Q2).
- **23.** M.H Almasi\*, **A. Sadollah**, S. Mounes, M. Karim, "Optimization of a transit services model with a feeder bus and rail system using metaheuristic algorithms", *Journal of Computing in Civil Engineering (SCI journal)*, 29(6) (Nov. 2015) 04014090(1-13), (IF: 2.554, Q2).

- **24.** R. Sheikholeslami, B. Gholipour Khalili, **A. Sadollah,** J.H. Kim\*, "Optimization of reinforced concrete retaining walls via hybrid firefly algorithm with upper bound strategy", *KSCE Journal of Civil Engineering (SCIE journal)*, 20(6) (2016) 2428–2438 (IF: 1.428, Q2).
- **25.** T.T. Ngo, **A. Sadollah**, J.H. Kim\*, "A cooperative particle swarm optimizer with stochastic movements for computationally expensive numerical optimization problems", *Journal of computational Science (SCIE journal)*, 13 (2016) 68-82 (IF: 2.502, Q1).
- **26. A. Sadollah**, H. Eskandar, H.M. Lee, D.G. Yoo, J.H. Kim\*, "Water cycle algorithm: a detailed standard code", *SoftwareX* (*Scopus Indexed*), 5 (2016) 37-43.
- **27.** H.M. Lee, D.G. Yoo, **A. Sadollah**, J.H. Kim\*, "Optimal cost design of water distribution networks using a decomposition approach", *Engineering Optimization (SCIE journal)*, 48(12) (2016) 2141-2156 (IF: 1.809, Q1).
- **28.** M.H Almasi, **A. Sadollah**, S. Kang\*, M.R. Karim, "Optimization of an improved intermodal transit model equipped with feeder bus and railway systems using metaheuristics", *Sustainability (SCIE journal)*, 8 (Jan. 2016), 537-563 (IF: 2.592, Q2).

- **29.** K. Gao, P.N. Suganthan, Q.K. Pan\*, M.F. Tasgetiren, **A. Sadollah**, "Artificial Bee Colony Algorithm for Scheduling and Rescheduling Fuzzy Flexible Job Shop Problem with New Job Insertion", *Knowledge-Based Systems (SCI journal)*, 109 (Oct. 2016), 1–16 (IF: 5.101, Q1).
- **30.** K. Gao\*, Y. Zhang, **A. Sadollah**, R. Su, "Optimizing Urban Traffic Light Scheduling Problem Using Harmony Search with Ensemble of Local Search", *Applied Soft Computing (SCIE journal)*, 48 (Nov. 2016) 359–372 (IF: 4.873, Q1).

- **31.** S.M.A. Pahnehkolaei, A. Alfi\*, **A. Sadollah**, J.H. Kim, "Gradient-based water cycle algorithm with evaporation rate applied to chaos suppression", *Applied Soft Computing (SCIE journal)*, 53 (April 2017) 420–440 (IF: 4.873, Q1).
- **32. A. Sadollah\***, N. Yadav, K. Gao, R. Su, "Metaheuristic optimization methods for approximate solving of singular boundary value problems", *Journal of Experimental & Theoretical Artificial Intelligence (SCIE journal)*, 29(4) (2017) 823-842 (IF:2.111, Q2).
- **33.** K. Gao\*, Y. Zhang, **A. Sadollah**, A. Lentzakis, R. Su, "Jaya, harmony search, and water cycle algorithms for solving large-scale real-life urban traffic light scheduling problem", *Swarm and Evolutionary Computation (SCIE journal)*, 37 (Dec. 2017) 58-72 (IF: 6.330, Q1).
- **34.** J. Yazdi, **A. Sadollah**, E.H. Lee, D.G. Yoo, J.H. Kim\*, "Application of multi-objective evolutionary algorithms for the rehabilitation of storm sewer pipe networks", *Journal of Flood Risk Management (SCIE journal)*, 10(3) (2017) 326–338 (IF: 3.24, Q1).
- **35.** M. Moradi, **A. Sadollah**, H. Eskandar\*, H. Eskandar, "Application of water cycle algorithm to portfolio selection", *Economic Research (SCIE journal)*, 30(1) (Sep. 2017) 1277-1299 (IF: 1.381, Q2).

- **36.** M. Almasi, **A. Sadollah**, Y. Oh, D.K. Kim, S. Kang\*, "Optimal coordination strategy for an integrated multimodal transit system considering multiple objectives", *Sustainability (SCIE journal)*, 10(3) (March 2018) 734(1-28) (IF: 2.592, Q2).
- **37. A. Sadollah**, H. Sayyaadi, D.G Yoo, H.M. Lee, J.H. Kim\*, "Mine blast harmony search: a new hybrid optimization method for improving exploration and exploitation capabilities", *Applied Soft Computing (SCIE journal)*, 68 (July 2018) 548-564 (IF: 4.873, Q1).
- **38.** K. Gao\*, L. Wang, J. Luo, H. Jiang, **A. Sadollah**, Q. Pan, "Discrete harmony search algorithm for scheduling and rescheduling the reprocessing problems in remanufacturing: A case study", *Engineering Optimization (SCIE journal)*, 50(6) (2018) 965-981 (IF: 1.809, Q1).

- **39.** E. Osaba\*, J. Del Ser, **A. Sadollah**, N. Bilbao, D. Camacho, "A discrete water cycle algorithm for solving the symmetric and asymmetric traveling salesman problem", *Applied Soft Computing (SCIE journal)*, 71 (Oct. 2018) 277-290 (IF: 4.873, Q1).
- **40. A. Sadollah**, H. Sayyaadi\*, A. Yadav, "A dynamic metaheuristic optimization model inspired by biological nervous systems: Neural network algorithm", *Applied Soft Computing (SCIE journal)*, 71 (Oct. 2018) 747-782 (IF: 4.873, Q1).

- **41.** S.H. Mahdavi\*, F. Rahimzadeh Rofooei, **A. Sadollah**, C. Xu, "A wavelet-based scheme for impact identification of framed structures using combined genetic and water cycle algorithms", *Journal of Sound and Vibration (SCIE journal)*, 443 (March 2019) 25-46 (IF: 3.123, Q1).
- **42.** H.M. Lee, D. Jung, **A. Sadollah**, D.G. Yoo, J.H. Kim\*, "Generation of benchmark problems for optimal design of water distribution systems", *Water (SCIE journal)*, 11(8) (Aug. 2019) 1637-1651 (IF: 2.524, Q1).
- **43. A. Sadollah\***, K. Gao, Y. Zhang, Y. Zhang, R. Su, "Management of traffic congestion in adaptive traffic signals using a novel classification-based approach", *Engineering Optimization (SCIE journal)*, 51(9) (2019) 1509-1528 (IF: 1.809, Q1).
- **44.** H. Sayyaadi\*, **A. Sadollah**, A. Yadav, N. Yadav, "Stability and iterative convergence of water cycle algorithm for computationally expensive and combinatorial Internet shopping optimization problems", *Journal of Experimental & Theoretical Artificial Intelligence* (SCIE Journal), 31 (5) (2019) 701–721 (IF: 2.111, Q2).
- **45.** H.M. Lee, D. Jung, **A. Sadollah**, J. H. Kim\*, "Performance comparison of metaheuristic algorithms using a modified Gaussian fitness landscape generator", *Soft Computing (SCIE Journal)*, https://doi.org/10.1007/s00500-019-04363-y (Sep. 2019) 1-11 (IF: 2.784, Q1).

- **46. A. Sadollah**, M. Nasir, Z.W. Geem\*, "Sustainability and optimization: from conceptual fundamentals to applications", *Sustainability (SCIE Journal)*, 12(5), (2020) 2027 (1-34) (IF: 2.592, Q2).
- **47.** M. Nasir, **A. Sadollah**, Y.H. Choi, J.H. Kim\*, "A comprehensive review on water cycle algorithm and its applications", *Neural Computing and Applications (SCIE journal)*, (June 2020), https://doi.org/10.1007/s00521-020-05112-1 (IF: 4.664, Q1).
- **48.** M. Nasir, **A. Sadollah**, J.H. Yoon, Z.W. Geem\*, "Comparative study of harmony search algorithm and its applications in China, Japan and Korea" *Applied Sciences (SCIE Journal)*, 10, (2020) 3970 (1-26).

- **49. A. Sadollah**, K. Gao, J.H. Kim\*, "Memetic computing for imprecise solution of T-shaped heat transfer fins" *Engineering Optimization* (2020) DOI: 10.1080/0305215X.2020. 1806256 (IF: 2.165, Q1).
- **50.** A. Yadav\*, **A. Sadollah**, N. Yadav, J.H. Kim, "Self-adaptive global mine blast algorithm for numerical optimization", *Neural Computing and Applications (SCIE journal)* 32 (2020) 24232444 (IF: 4.664, Q1).
- **51.** K. Gao, Y. Huang, **A. Sadollah**, L. Wang\*, "A review of energy-efficient scheduling in intelligent production systems", *Complex & Intelligent Systems (Scopus Index)*, 6 (2020) 237-249, *Complex & Intelligent Systems* (IF: 4.927, Q1).

- **52.** M. Nasir\*, **A. Sadollah**, I. Berkan Aydilek, A. Lashkar Ara, S.A. Nabavi-Niaki, "A combination of FA and SRPSO algorithm for Combined Heat and Power Economic Dispatch", *Applied Soft Computing (SCIE journal)*, 102, 107088 (IF: 4.873, Q1).
- **53.** M.H. Almasi, Y. Oh, **A. Sadollah**, Y.J. Byon, S. Kang\*, "Urban transit network optimization under variable demand with single and multi-objective approaches using metaheuristics: The case of Daejeon, Korea" *International Journal of Sustainable Transportation*, 15(5) (2021) 1-21 (IF: 3.120, Q1).

# Conference Proceedings (Underline Means Presenter) 2012

1. <u>A. Sadollah</u>, A. Bahreininejad\*, H. Eskandar, M. Hamdi, "Optimum material gradient for functionally graded dental implant using particle swarm optimization", International Conference of Biomaterial and Bioengineering 2012 (ICBB 2012), 19-20 December, Hong Kong.

## 2013

**2.** <u>A. Sadollah</u>, H. Eskandar, J.H. Kim\*, D.G. Yoo, "Sizing optimization of sandwich panels having prismatic core using water cycle algorithm", The 4<sup>th</sup> Global Congress on Intelligent Systems 2013 (GCIS 2013), IEEE, 3-4 December, pp. 325-328, Hong Kong.

#### 2014

- **3.** <u>A. Sadollah</u>, D.G. Yoo, J.H. Kim\*, "Water cycle algorithm and its application to water pumping system", Accepted Abstract (International Session), Korea Water Research Association, 15-16 May 2014, Busan, South Korea.
- **4.** <u>A. Sadollah</u>, D.G. Yoo, J. Yazdi, J.H. Kim\*, Y. Choi, "Application of water cycle algorithm for optimal cost design of water distribution systems", The 11<sup>th</sup> International Conference on Hydroinformatics (HIC 2014), 17-21 August 2014, New York City, New York, USA.

**5.** <u>D.G. Yoo</u>, **A. Sadollah**, J.H. Kim\*, H.M. Lee, "Application of new hybrid harmony search algorithms based on cellular automata theory for solving magic square problems", Proceedings of 4<sup>th</sup> International Conference on Soft Computing for Problem Solving Advances in Intelligent Systems and Computing (SocPros 2014), Volume 335, pp. 245-253, 27-29 December 2014, NIT Silchar, Silchar, Assam, India.

#### 2015

- **6.** Y. Choi, H.M. Lee, D.G. Yoo, J.H. Kim\*, **A. Sadollah**, <u>J.H. Choi</u>, "Development of Opti-HSNET for the optimal design of water distribution network", International Conference Data Mining, Civil and Mechanical Engineering (ICDMCME 2015), Feb. 1-2, 2015, Bali, Indonesia.
- 7. <u>J.H. Kim\*</u>, H.M. Lee, D. Jung, **A. Sadollah**, "Performance Measures of Metaheuristic Algorithms", The 2<sup>nd</sup> International Conference on Harmony Search Algorithm (ICHSA 2015), Aug. 19-21, 2015, Hana Square, Korea University, Seoul, South Korea.
- **8.** <u>A. Sadollah</u>, H.M. Lee, D.G. Yoo, J.H. Kim\*, "Mine blast harmony search and its applications", The 2<sup>nd</sup> International Conference on Harmony Search Algorithm (ICHSA 2015), Aug. 19-21, 2015, Hana Square, Korea University, Seoul, South Korea.
- **9.** <u>A. Sadollah</u>, Y. Choi, J.H. Kim\*, "Metaheuristic optimization algorithms for approximate solutions to ordinary differential equations", IEEE Congress on Evolutionary Computation (CEC 2015), May 25-28, 2015, Sendai International Center, Sendai, Japan.
- **10.** J.H. Kim\*, et al., "KU battle of metaheuristic algorithms 1: Development of six new algorithms", The 2<sup>nd</sup> International Conference on Harmony Search Algorithm (ICHSA 2015), Aug. 19-21, 2015, Hana Square, Korea University, Seoul, South Korea.
- **11.** J.H. Kim\*, et al., "KU battle of metaheuristic algorithms 2: Performance test", The 2<sup>nd</sup> International Conference on Harmony Search Algorithm (ICHSA 2015), Aug. 19-21, 2015, Hana Square, Korea University, Seoul, South Korea.
- **12.** <u>J.H. Kim\*</u>, T.T Ngo, **A. Sadollah**, "A new collaborative approach to particle swarm optimization for global optimization", Proceedings of 5<sup>th</sup> International Conference on Soft Computing for Problem Solving Advances in Intelligent Systems and Computing (SocPros 2015), 18-20 December 2015, IIT Roorkee, India.
- **13.** <u>J. Bahl</u>, D. Shyam, S. Gunturi, A. Bahreininejad\*, **A. Sadollah**, R. Narayanan, "Mine blast algorithm for the estimation of pharmacokinetic and pharmacodynamics parameters", (Poster Presentation), Oct. 25-29, 2015 AAPS Annual Meeting and Exposition, Orlando, Florida (Poster Presentation).

#### 2016

**14.** <u>H.M. Lee</u>, D. Jung, **A. Sadollah**, J.H. Kim\*, "Test problem generation using a modified Gaussian fitness landscape generator", The 12<sup>th</sup> International Conference on Hydroinformatics (HIC 2016), 21-26 August 2016, Incheon, South Korea.

- **15.** <u>A. Sadollah\*</u>, R. Su, J.H. Kim, K. Gao, "Approximate solutions of heat transfer fins with convex and exponential profiles using Fourier-based optimization method", IEEE Congress on Evolutionary Computation (CEC 2016), July 24-29, 2016, Vancouver, Canada, pp. 5106-5112.
- **16.** <u>A. Barzegar</u>, **A. Sadollah**, L. Rajabpour, R. Su\*, "Optimal power flow solution using water cycle algorithm", The 14<sup>th</sup> International Conference on Control, Automation, Robotics and Vision (ICARCV 2016), November 13–15, 2016, Phuket, Thailand.
- **17.** <u>A. Sadollah\*</u>, K. Gao, A. Barzegar, R. Su, "Improved model of combinatorial Internet shopping optimization problem using evolutionary algorithms", The 14<sup>th</sup> International Conference on Control, Automation, Robotics and Vision (ICARCV 2016), November 13–15, 2016, Phuket, Thailand.
- **18.** <u>K. Gao</u>, **A. Sadollah**, Y. Zhang, R. Su\*, "Discrete Jaya algorithm for flexible job shop scheduling problem with new job insertion", The 14<sup>th</sup> International Conference on Control, Automation, Robotics and Vision (ICARCV 2016), November 13–15, 2016, Phuket, Thailand.
- 19. <u>E. Mendez</u>, O. Castillo, J. Soria, P. Melin\*, **A. Sadollah**, "Water cycle algorithm with fuzzy logic for dynamic adaptation of parameters", Mexican International Conference on Artificial Intelligence (MICAI 2016), pp. 250-260 October 23-29, Cancún, Mexico.
- **20.** <u>K. Gao</u>, Y. Zhang, **A. Sadollah**, R. Su\*, "Solving large-scale urban traffic signal control problem using improved Jaya algorithm", The 14<sup>th</sup> International Conference on Control, Automation, Robotics and Vision (ICARCV 2016), November 13–15, 2016, Phuket, Thailand.

- **21.** T.T. Ngo, **A.** Sadollah, D.G. Yoo, J.H. Kim\*, "The extraordinary particle swarm optimization and its application in constrained engineering problems", The 3<sup>rd</sup> International Conference on Harmony Search Algorithm (ICHSA 2017), Advances in Intelligent Systems and Computing 514:35-41, February 22-24, 2017, Bilbao (Bizkaia, Basque Country), Spain.
- **22.** S.J Mousavi\*, P. Nakhaei, <u>A. Sadollah</u>, J.H. Kim, "Optimization of hydropower storage projects using harmony search algorithm", The 3<sup>rd</sup> International Conference on Harmony Search Algorithm (ICHSA 2017), Advances in Intelligent Systems and Computing 514:261-270, February 22-24, 2017, Bilbao (Bizkaia, Basque Country), Spain.
- **23.** J.H. Kim\*, H.M. Lee, D. Jung, **A. Sadollah**, "Engineering benchmark problem generation and performance measurement of evolutionary algorithms", IEEE Congress on Evolutionary Computation (CEC 2017), DOI: 10.1109/CEC.2017.7969380, June 5-8, 2017, Donostia San Sebastián, Spain.

- **24.** <u>K. Gao</u>, Y. Zhang, **A. Sadollah**, R. Su\*, "Improved artificial bee colony algorithm for solving urban traffic light scheduling problem", DOI: 10.1109/CEC.2017.7969339, IEEE Congress on Evolutionary Computation (CEC 2017), 395-402, June 5-8, 2017, Donostia San Sebastián, Spain.
- 25. A. Sadollah\*, M. Moradi, H. Eskandar, H. Eskandar, "Non-dominated sorting water cycle algorithm for optimal selection of cardinality constrained portfolio problem", International Conference on Recent Trends in Operations Research and Statistics (RTORS 2017), 28-30 December 2017, Indian Institute of Technology Roorkee, Roorkee, Uttarakhand, India.

- **26.** <u>H.M.</u> <u>Lee</u>, D. Jung, **A. Sadollah**, E.H. Lee, J.H. Kim\*, "Performance comparison of metaheuristic optimization algorithms using water distribution system design benchmarks", The Fourth International Conference on Harmony Search, Soft Computing and Applications (ICHSA 2018), February 7-9, 2018, BML Munjal University, Gurgaon, India.
- 27. <u>A. Sadollah\*</u>, H. Sayyaadi, "Real data internet shopping optimization problems using metaheuristics", The Fourth International Conference on Harmony Search, Soft Computing and Applications (ICHSA 2018), February 7-9, 2018, BML Munjal University, Gurgaon, India.
- **28.** M. Khorasanchi, H. Sayyaadi\*, <u>P. Ziyaei</u>, **A. Sadollah**, "Layout optimization of a wind farm with various sizes of turbine", 20<sup>th</sup> International Marine Industries Conference, 17-19 Dec. 2018, Kish Island, Iran.

#### 2019

- **29.** M. Khorasanchi, H. Sayyaadi\*, <u>P. Ziyaei</u>, **A. Sadollah**, "Layout optimization of a wind farm with various sizes of turbine", 38<sup>th</sup> International Conference on Ocean, Offshore & Arctic Engineering, June 9-14 (OMAE 2019), Glasgow, Scotland, UK.
- **30.** <u>A. Sadollah\*</u>, J.H. Kim, Y. Choi, N. Karamodin, "4-Rule harmony search algorithm for solving computationally expensive optimization test problems", The Fifth International Conference on Harmony Search, Soft Computing and Applications (ICHSA 2019), July 20-22, 2019, Kunming, China.

- **31.** <u>A. Sadollah</u>, M. Nasir, A.K. Al-Shamiri, J.H Kim\*, "Improvement of voltage profile and loss reduction based on optimal placement and sizing of renewable distributed generations using 4-rule harmony search algorithm", The Sixth International Conference on Harmony Search, Soft Computing and Applications (ICHSA 2020), July 16-17 (Online), 2020, Istanbul, Turkey.
- **32.** A.K. Al-Shamiri, A. Sadollah, J.H Kim\*, "Harmony search algorithms for optimizing extreme learning machines", The Sixth International Conference on Harmony Search, Soft Computing and Applications (ICHSA 2020), July 16-17 (Online), 2020, Istanbul, Turkey.

33. M. Nasir, <u>A. Sadollah\*</u>, E. Osaba, J. Del Ser, "A Novel Metaheuristic Approach for Loss Reduction and Voltage Profile Improvement in Power Distribution Networks Based on Simultaneous Placement and Sizing of Distributed Generators and Shunt Capacitor Banks", In: Analide C., Novais P., Camacho D., Yin H. (eds) Intelligent Data Engineering and Automated Learning – IDEAL 2020. IDEAL (2020). Lecture Notes in Computer Science, vol 12489. Springer, Cham. https://doi.org/10.1007/978-3-030-62362-3\_7.

# **Book Chapters (Contribution to Books)**

#### 2012

**1. A. Sadollah**, A. Bahreininejad, "Optimum material gradient for functionally graded dental implant using simulated annealing". In: *Simulated Annealing - Single and Multiple Objective Problems*, Edited by M.S.G. Tsuzuki, Croatia, ISBN 978-953-51-0767-5, Publisher: InTech Publication, pp. 217-238 (Chapter 11) (Oct. 17, 2012).

## 2015

**2. A. Sadollah**, J.H. Kim, "Imprecise Solutions of Ordinary Differential Equations for Boundary Value Problems Using Metaheuristic Algorithms". In: *Handbook of Research on Modern Optimization Algorithms and Applications in Engineering and Economics*, Editors: P. Vasant, G-W Weber, V.N. Dieu, Publisher: IGI Global Publication, pp. 401-421 (Chapter 15) (March, 2015).

#### 2016

**3.** E. Mendez, O. Castillo, J. Soria, **A. Sadollah**, "Water cycle algorithm with fuzzy dynamic adaptation of parameters". In: *Nature-Inspired Design of Hybrid Intelligent Systems*, Editors: P. Melin, O. Castillo, J. Kacprzyk, Volume 667 of the series Studies in Computational Intelligence, pp. 297-311, (Chapter 20), Publisher: Springer (10<sup>th</sup> Dec. 2016).

#### 2018

**4. A. Sadollah**, "Which membership function in fuzzy logic system is appropriate?". In: *Fuzzy Logic Based in Optimization Methods and Control Systems and its Applications*, Editor: A. Sadollah, Tehran, Iran, Publisher: InTech Publication (31<sup>th</sup> Oct. 2018).

# **Book Editor**

#### 2018

**1. A. Sadollah**, Book Title: "Fuzzy Logic Based in Optimization Methods and Control Systems and its Applications", InTechOpen Publication, (31<sup>th</sup> Oct. 2018).

- **2. A. Sadollah**, C.M. Travieso-Gonzalez, Book Title: "Recent Trends in Artificial Neural Networks: from Training to Prediction", InTechOpen Publication, (4<sup>th</sup> March 2020).
- **3. A. Sadollah**, T. Sinha, Book Title: "Recent Trends in Computational Intelligence", InTechOpen Publication, (6<sup>th</sup> May 2020).

# **Undere Review & Ready to Submit Manuscripts**

- **1.** A wavelet-based strategy for structural identification and damage detection using modified genetic algorithm, *Not Decided*.
- 2. Improved harmony search algorithm and its sensitivity analysis for large-scale optimization of pipe design cost in water distribution networks, *Iranian journal of science and technology*.
- **3.** Reliability based optimal design of hydropower projects using extended harmony search algorithm, *Not Decided*.
- **4.** Artificial neural network method for numerical solution of two-parameter singularly perturbed boundary value problems of type convection diffusion and less severe boundary layer problem, *Computational and Applied Mathematics*.
- **5.** Optimum tilt angle and orientation of solar surfaces in Chabahar, Iran using metaheuristics, *Journal of Computational Science*.
- **6.** A Novel Fully Informed Water Cycle Algorithm for Solving Optimal Power Flow Problems in Electric Grids, *Electrical Engineering*.
- **7.** Minimizing the levelized cost of energy in an offshore wind farm with non-homogeneous turbines through layout optimization, *Ocean Engineering*.
- **8.** Power generation rescheduling based contingency constrained optimal power flow using WCA for security improvement, *IETE Journal of Research*.
- **9.** Prediction and Optimization of Electrical Conductivity for Polymer-Based Composites Using Design of Experiment and Artificial Neural Networks, *Neural Computing & Applications*.
- **10.** HS-Solver: An Open Source Add-in for Solving Linear, Integer, and Nonlinear Optimization Problems in Excel, *Not Decided*.
- **11.** Harmony Search Algorithm and Fuzzy Theory: An Extensive Review from Theory to Applications, *Not Decided*.
- **12.** Modelling and Scheduling Integration of Distributed Production and Distribution Problems via Black Widow Optimization, *Swarm and Evolutionary Computations*.
- **13.** Improved Q-learning algorithm for solving permutation flow shop scheduling problems, *IET journal*.
- **14.** Mathematical Modelling and Optimization of Integrated Distributed Production and Distribution Problems with Time Windows, *Expert Systems with Applications*.

- **15.** A Comprehensive Review on Applications of Grey Wolf Optimizer in Energy Systems, *Engineering Applications of Artificial Intelligence*.
- **16.** A Comprehensive Review on Jaya Algorithm: Improvements, Applications, and Prospects, *Swarm and Evolutionary Computation*.

# **Other Academic Activities**

# **Awards & Honors**

- Best presented paper at ICHSA 2015, 19-21 Aug. 2015, Seoul, South Korea
- Best conference paper at SocPros 2014, 27-29 Dec. 2014, Silchar, Assam, India
- Best student paper at SocPros 2015, 18-20 Dec. 2015, IIT Roorkee, India
- Developer of Water Cycle Algorithm (WCA) as a metaheuristic optimization method
- Excellent reviewer reported by <u>Publons.com</u>.
- Member of Young Researchers and Elite Club
- Book Editor of InTechOpen Publication (Book Title: Fuzzy Logic Based in Optimization Methods and Control Systems and its Applications)
- Best conference paper at ICHSA 2018, 7-9 Feb. 2018, Gurougram, India
- Included in Worlds Top 2% scientist (raw 88088) published by Stanford University:
  - o In NEWS (Persian):

Iranian Students News Agency

Bar Khat News

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# **Invited Talks**

- A. Sadollah, "Recently developed metaheuristic algorithms and their applications in water and civil engineering", *First Symposium of harmony search algorithm*, Korea University, Seoul, South Korea, 13-14 February 2014.
- A. Sadollah, "Mine blast and water cycle algorithms: ideas and strategies", 4<sup>th</sup> International Conference on Soft Computing for Problem Solving (SocPros 2014), 27-29 December 2014, NIT Silchar, Silchar, Assam, India.
- **A. Sadollah,** "Water cycle and neural network algorithms: Theory and practice", 4<sup>th</sup> on Contemporary Issues in Computer Information and Sciences, 23-24 Jan. 2019, Kharazmi University, Karaj, Iran.
- A. Sadollah, "Water cycle and neural network algorithms", Soft Computing Research Society (SCRS), SCRS Lecture Series: NIA-I, 12 June 2020, Akbar Bhawan Chankyapuri, Chanakyapuri, New Delhi, Delhi 110021, India (two online sessions).

# **Committee Member**

- Scientific and Organizing Committee for the 2<sup>nd</sup> International Conference on Harmony Search Algorithm 2015 (ICHSA 2015), 20-21 Aug. 2015, Seoul, South Korea.
- Scientific Committee for the 5<sup>th</sup> International Student Competition in Structural Optimization (ISCSO 2015).
- Session chair for the 2<sup>nd</sup> International Conference on Harmony Search Algorithm (ICHSA 2015), 20-21 Aug 2015, Korea University, Seoul, South Korea.
- Technical program committee for the 1<sup>st</sup> EAI International Conference on Computer Science and Engineering, November 11–12, 2016, Penang, Malaysia.
- Session chair (Session FP12: Engineering applications) for IEEE CEC 2016, 24-29, July 2016, Vancouver, Canada.
- International scientific committee for the 3<sup>rd</sup> International Conference on Harmony Search Algorithm 2017 (ICHSA 2017), 20-21 Aug 2017, Spain.
- Organizer of invited session at 14<sup>th</sup> International Conference on Control, Automation, Robotics and Vision (ICARCV 2016), Invited Session: "Evolutionary Algorithms for Scheduling and Combinatorial Optimization", November 13–15, 2016, Phuket, Thailand.
- Co-chair of Technical Session at the 14th International Conference on Control, Automation (ICARCV 2016), Session: Su35 Evolutionary Algorithms for Scheduling & Combinatorial Optimization, November 13–15, 2016, Phuket, Thailand.
- Scientific Committee for the 6<sup>th</sup> International Student Competition in Structural Optimization (ISCSO 2016).
- Member of Program Committee at IEEE International Conference on Evolutionary Computation, Donostia San Sebastián, Spain, June 5-8, 2017, In: Special Session on Engineering Applications of Evolutionary Computation. By: A. H. Gandomi & J.H. Kim.
- Program committee member/reviewer for the 8<sup>th</sup> Workshop on Computational Optimization, Modelling and Simulation at International Conference on Computational Science, Zürich, Switzerland, 12-14 June, 2017.
- International scientific committee and PC member for the 3<sup>rd</sup> International Conference on Harmony search algorithm, Soft Computing and Applications 2018 (ICHSA 2018), Feb. 07-09 2018, Gurgaon, India.
- Scientific Committee for the 7<sup>th</sup> International Student Competition in Structural Optimization (ISCSO 2017).
- Session chair for ICHSA 2018, 7-9, Feb. 2018, Gurgaon, India.
- Scientific committee for the 6<sup>th</sup> International Conference on Harmony search algorithm, Soft Computing and Applications, 2020 (ICHSA 2020), Apr. 22-24 2018, Istanbul, Turkey.
- International scientific collaborator Joint Research Laboratory on Artificial Intelligence (JRL-AI).

# Contribution as a reviewer for Journal and Conference Proceedings

- Applied Soft Computing (Publisher: Elsevier)
- Information Science (Publisher: Elsevier)
- Transactions of the Institute of Measurement and Control (Publisher: SAGE)
- Neural Computing and Applications (Publisher: Springer)
- Journal of Applied Mechanics-Transactions of the ASME
- Swarm and Evolutionary Computation (Publisher: Elsevier)
- Structural Engineering and Mechanics, an International Journal
- International Journal of Computational Methods
- Journal of Hydro-environment Research (Publisher: Elsevier)
- Engineering Science and Technology: An International Journal
- Mechanics of Advanced Composite Structures
- Journal of computational applied mechanics (Publisher: University of Tehran)
- Transactions of the Institute of Measurement and Control (Publisher: SAGE)
- Iranian Journal of Science and Technology Transactions of Mechanical Engineering
- Sub-reviewer of the Ynd and Yrd ICHSA 2015, Y. Y. Y. (International Conference on Harmony search algorithm, Soft computing and Applications)
- Sub-reviewer of the 14<sup>th</sup> International Conference on Control, Automation, Robotics and Vision (ICARCV 2016)
- Associate Editor of the 15<sup>th</sup> International Conference on Control, Automation, Robotics and Vision (ICARCV 2018)

# **Supported Grants & International Funds**

- Exploratory Research Grant Scheme (ERGS), University of Malaya, August 2011 ~ August 2013, (Project Title: Development and Applications of Metaheuristic Algorithms in Engineering Design and Structural Optimization), Kuala Lumpur, Malaysia.
- National Research Foundation (NRF) of Korean Government, Korea University, July 2013 ~ September 2015 (Project Title: Establishment of Original Technology and Globalization Strategy of Harmony Search Algorithm), Seoul, South Korea.
- Economic Development Board of Singapore, Nanyang Technological University, February 2016 ~ February 2017, (Project Title: Distributed adaptive urban traffic signal control based on V2X information Infrastructure), Singapore.
- Strategic Center for Energy and Sustainable Development, Semnan branch, Islamic Azad University, May 2015 ~ Jun 2015, (Project Title: Optimal cost design of water distribution networks using a decomposition approach), Semnan, Iran.
- Sharif University of Technology, Under International Elite Association, Tehran, Iran (June 2017 ~ July 2018).

#### **Affiliated universities and research institutes**

- Faculty of Engineering, University of Malaya, 50603 Kuala Lumpur, Malaysia
- School of Civil, Environmental and Architectural Engineering, Korea University, 136-713, Seoul, South Korea

• School of Electrical and Electronic Engineering, Nanyang Technological University, 639798, Singapore

- Strategic Center for Energy and Sustainable Development, Semnan branch, Islamic Azad University, Semnan, Iran
- Young Researchers and Elites club, Science and Research Branch, Islamic Azad University, Tehran, Iran
- School of Mechanical Engineering, Sharif University of Technology, Azadi Avenue, Tehran, Iran
- Department of Mechanical Engineering, University of Science and Culture, Tehran, Iran

# Research Performance Metrics (Last Update: 16th April 2021)

H-Index (Based on Google Scholar): 23 i10-Index: 39

Total Citation (Based on Google Scholar): 3161

Research Items: 96

Researcher ID: H-1199-2011

H-Index (Based on Scopus): 21

Total Citation (Based on Scopus): 2271 total citations by 1590 documents

Research Items: 74

Subject Area: Computer Science, Engineering Co-authors: **74** Scopus ID: **37124859400** 

H-Index (Based on Web of Science): 20

Average Citations per Items: 27.8 Average Citations per Year: 188.7

Total Citation (Based on Web of Science): 1887

Total Publication Indexed (Based on Web of Science): 68

ORCID: 0000-0002-7782-4126

H-Index (Based on ResearchGate): 22

Total Citation (Based on ResearchGate): 2555

Reads: 37811 Research Items: 102 RG Score: 32.23

Recommendation: 153 Total Research Interest: 1910

# Peer Review Metrics Reported by Publon (Last Update: 16th April 2021)

- Active member of Publons.com as a registered reviewer (ID: 452656)
- Publons Peer Review Awards 2017, Top 1% in Field of Mathematics
- Publons Peer Review Awards 2017, Top 1% in Field of Computer Science
- Publons Peer Review Awards 2018, Top 1% in Field of Computer Science

Verified Reviews: **141** (Median: 3 & 99<sup>th</sup> Percentile) Review to Publication Ratio: **2:1** (Median: 0.3:1)

# **Employment Backgrounds & Academic Experiences**

# **Academic Experiences**

#### **Past**

- Visiting scholar at Korea University, Seoul, South Korea (July-August, 2019).
- Post-doctoral research fellow at Nanyang Technological University, Singapore (Feb. 2016 ~ Feb. 2017).
- Post-doctoral research fellow at Korea University, South Korea (Sep. 2013 ~ Sep. 2015).
- Research assistant at University of Malaya (Aug. 2011 ~ Aug. 2013).
- Supervising 3 MSc students and 2 PhD candidates at University of Malaya (2010~2013).
- Supervising graduate students (Water lab), at Korea University, Korea (2013 ~ 2015).
- Lecturer at Islamic Azad University of Robat Karim, Tehran, Iran (Sep. 2017 ~ Sep 2018) (Teaching Code: 308298406689501, Internal Code: 95134).
- Lecturer at Islamic Azad University of Parand, Tehran, Iran (Sep. 2017 ~ Sep. 2018) (Teaching Code: 308298406689501, Internal Code: 961352).
- Lecturer and guest assistant professor at Sharif University of Technology, Tehran, Iran (June 2017 ~ Nov. 2018).

## **Present**

- Assistant Professor at University of Science and Culture, Tehran, Iran (Feb. 2018 ~ Present).
- Online Teacher at FaraDars, Course Taught: "Water Cycle Algorithm for solving unconstrained, constrained, and discrete optimization problems" (In Persian). Website: "https://faradars.org/courses/fvop9608-water-cycle-algorithm-for-solving-optimization-problems"

# **Industrial Experiences**

#### **Past**

- Served as researcher at a manufacture factory in order to carry out the MSc final project, Semnan, Iran, (Aug. 2009 ~ Aug. 2010).
- Assemble manager at a computer assembling company, Semnan, Iran, (Sep. 2006 ~ Sep. 2008).

#### **Present**

• Designer and consultant of cold roll forming products, 2007 ~ present (www.avinsanat.com).

# **Teaching & lecturing Experience**

I am a firm believer in active learning, and I try to maintain a very lively and interactive classroom. To me, teaching is not about lecturing to students; it is about presenting theories, concepts, and empirical material to students in a way that they can integrate this information into

their own life experience. I try to accomplish this not only in my presentations and lectures, but in the questions that structure classroom discussion and, particularly, in writing assignments. Below are my taught courses and interested courses based on my study background and research experience:

# **Taught Courses (2009 ~ Present):**

#### Past

- Engineering Drawing, at University of Malaya (Oct. 2012 ~ Mar. 2013).
- <u>Introduction to optimization Theory & Neural Networks</u>, Course Code: ACE538 (graduate students), at Korea University, Seoul, South Korea (Jun. 2015 ~ Sep. 2015).
- <u>Numerical Computation in Engineering</u>, at Korea University, Seoul. South Korea, (Aug. 2014 ~ Sep. 2015).
- Strength of Material I, at Robat Karim Azad University (Sep. 2017 ~ Aug. 2018).
- Numerical Optimization, at Robat Karim Azad University (Sep. 2017 ~ Aug. 2018).
- Elasticity, at Robat Karim Azad University (Sep. 2017 ~ Aug. 2018).
- Statics, at Robat Karim Azad University (Sep. 2017 ~ Aug. 2018).
- Statics, at Parand Azad University, Tehran, Iran (Sep. 2017 ~ Aug. 2018).
- Statics, at Sharif University of Technology, Tehran, Iran (Feb. 2018 ~ Jun 2018).
- <u>Strength of Material II,</u> at University of Science and Culture, Tehran, Iran (Feb. 2018 ~ Jun 2018).

#### **Present**

- <u>Teaching Technical English to Mechanical Engineers</u>, at University of Science and Culture, Tehran, Iran (Feb. 2018 ~ Present).
- <u>Element of Mechanical Engineering Design</u>, at University of Science and Culture, Tehran, Iran (Nov. 2018 ~ Present).
- <u>Finite Elements in Engineering</u>, at University of Science and Culture, Tehran, Iran (Nov. 2018 ~ Present).
- <u>Principles of Materials Science and engineering</u>, at University of Science and Culture, Tehran, Iran (Nov. 2018 ~ Present).
- <u>Engineering Mechanics: Dynamics</u>, at University of Science and Culture, Tehran, Iran (Sep. 2019 ~ Present).

#### **Graduated BS students:**

• Mr. Fooghani, Thesis Title: "Manufacture of laboratory prototype 3D printer machine by means of Fused Deposition Modeling method"

- Mr. Ardehali, Thesis Title: "Optimum orientation of solar panels: Chabahar case study (submitted to international journal)"
- Mrs. Shafee, Thesis Title: "Discussion of diesel engine turbochargers using GASTURB and MATLAB softwares"
- Mr. Mojtaba Ershad, Thesis Title: "Unmanned air vehicles optimization using simulated annealing optimization method" (submitted to CEC 2021)
- Mr. Ali Shayegani, Thesis Title: "Static analysis of cylindrical pressure vessels using finite element method"
- Mr. Naser Abed, Thesis Title: "Optimization of multi-pass face milling via neural network algorithm"
- Mr. Mohammad Sadeghi, Thesis Title: "Weight and power optimization of spur gears using metaheuristics and finite element method"

## **Some Interested Courses:**

- Elementary Heat Transfer
- Theory of Plates and Shells
- Introduction to Artificial Neural Network and Fuzzy System
- Engineering optimization
- Metaheuristics and Global Optimization

# **Additional Skills**

# **Computer & Software Skills**

- Microsoft office (WORD, EXCEL, POWERPOINT, VISIO), Latex.
- Mechanical engineering software (CAD/CAE) including ABAQUS, ANSYS, SOLIDWORKS, AUTOCAD, and CATIA.
- Industrial engineering software such as LINGO, LINDO, Minitab.
- WordPress (Site design software)

#### **Practical Skills**

- Having experience in practical activities such as welding and plating.
- Ability in assembling all parts and hardware of PC and laptops.

#### **Programming Language**

MATLAB (Advanced)

# **Languages Proficiency & International Experiences**

• Farsi (Persian): Mother tongue (Native)

English: Fluent (Total score TOEFL iBT= 87) (Received Date: 01/16/2010)
Germany: Basic (10 months living in Germany when I was 10 years old)
Korean: Introductory (living for 2 years as a post-doc research fellow)

# **International Experiences ("Purpose"):**

- Iran (Motherland Country)
- Germany (Mainz, Dortmund, and Düsseldorf) "Visiting"

- France (Paris, Nantes) "Visiting"
- Netherland "Visiting"
- Belgium "Visiting"
- China (Beijing, Shanghai, Hangzhou, and Kunming) "Visiting & Conference"
- Malaysia (Kuala Lumpur, Johor, Penang, Perlis, and Melaka) "PhD Program"
- Saudi Arabia (Mecca, Medina, and Jeddah) "Visiting"
- Indonesia (Medan) "Visiting"
- Hong Kong "Conference for 2 times"
- Singapore "Post-Doctoral Position"
- South Korea (Seoul, Busan, Ulsan, Daegu, and Incheon) "Post-Doctoral Position"
- Thailand (Phuket) "Conference"
- United State of America (New York City, New York) "Conference"
- India (Silchar, Agra, Delhi, Gurgaon) "Conference"
- Japan (Sendai, Tokyo) "Conference"
- Spain (Bilbao) "Conference"

# **Certificate of Technical Documents**

- Degree of technical standard ISO/TS 16949:2002, NIS CERT Company.
- Degree of internal auditor ISO/TS 16949:2002, NIS CERT Company.
- Degree of welding inspector, PASACO Company (NDT LEVEL II PT, MT).

# **Membership Affiliations**

- Member of Young Researchers and Elite club (Membership No.: 9586123002)
- Member of Iranian Organization for Engineering Order of Building (Mechanical Engineer)
- Professional member of ASME (Membership No.: 100310631)
- Professional member of IEEE (Membership No.: 91081107)
- Professional member of IEEE Computational Intelligence Society (CIS)
- Professional member of Big Data Community, IEEE
- Professional member of Cloud Computing Community, IEEE

# References

• Professor Ardeshir Bahreininejad (Former PhD Supervisor)

E-mail: ardeshir.bahreininejad@itb.edu.bn; bahreininejad@gmail.com

Address: Faculty of Engineering, Institut Teknologi Brunei, BE1410, Bandar Seri

Begawan, Brunei.

Professor Joong Hoon Kim (Former Post-Doctoral Supervisor)

E-mail: jaykim@korea.ac.kr

Address: Department of Civil, Environmental and Architectural Engineering,

Faculty of Engineering, Korea University, Seoul, South Korea.

• Professor Jamshid Mousavi (Former Co-author)

E-mail: jmosavi@aut.ac.ir

Address: Water Resources Engineering, Amirkabir University of Technology, Iran.

• Professor Mohd Hamdi Bin Abd Shukor (Former PhD Co-supervisor)

E-mail: hamdi@um.edu.my

Address: Department of Engineering Design and Manufacture, Faculty of

Engineering, University of Malaya, 50603, Kuala Lumpur, Malaysia.

• Professor Hassan Sayyaadi (Former Supervisor)

E-mail: sayyaadi@shairf.edu

Address: School of Mechanical Engineering, Sharif University of Technology,

Tehran, Iran.

• Professor Zong Woo Geem (Former Co-author)

E-mail: geem@gachon.ac.kr

Address: Department of Energy IT, Gachon University, Seongnam 13120, Korea

# **Declaration**

I, hereby, state that the statements made above are true to the best of my knowledge and belief. For further information, please feel free to contact me.

Ali Sadollah