In the name of God

Curriculum Vitae



Morteza Pakdaman,

Assistant Professor, Ph.D., Control and Optimization

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Education

Ferdowsi University of Mashhad, Mashhad, Iran
 Ph.D. Applied Mathematics (control and optimization),

- Hakim Sabzevari University, Sabzevar, Iran
 MSc. Applied Mathematics (Operations Research)
- Ferdowsi University of Mashhad, Mashhad, Iran BSc, Applied Mathematics

Teaching Experience (from 2006 to now)

- Calculus 1,2
- Applied mathematics
- Linear and non-linear optimization
- Ordinary differential equations
- Numerical analysis
- Fuzzy sets for industrial engineering
- Nonlinear optimization
- Operations research 1,2
- Decision making
- Integer programming
- Advisory of MSc and PhD students
- Mathematical software
- Mathematics of climate

Areas of Expertise

- Optimization
- Optimal control
- Fuzzy sets and neural networks
- Climate Modelling
- Multi-Model Ensemble (MME)

- Applications of Mathematics in climate studies

Skills

- Office (Word, Excel, PowerPoint...)
- MATLAB programming language-MATLAB App Designer
- Python
- GAMS (General Algebraic Modeling System)
- Latex

Prizes and Awards

- National Elites Foundation award for top PHD graduate (2015)
- Talented PhD student at Ferdowsi University of Mashhad
- ~ 2nd Rank between MSC students at Hakim Sabzevari University
- Receiving Kazemi Ashtiani grant from National Elites Foundation (2018)
- Distinguished Teacher (Kavian university)

Journal Publications

No	Title	Journal	Year
1	Artificial neural network approach for solving fuzzy differential equations	Elsevier (ISI): Information sciences	2010
2	Ordinary Differential Equations Solution in Kernel Space	Springer (ISI): Neural Computing and Applications	2010
3	Erratum to "A new branch and bound method with pretreatment for the binary quadratic programming" [Appl. Math. Comput. 192 (2007) 252–259]	Elsevier (ISI): Applied Mathematics and Computation	2011
4	A note on "A new local and global optimization method for mixed integer quadratic programming problems" by G.Q. Li et al.	Elsevier (ISI): Applied Mathematics and Computation	2011
5	Unsupervised kernel least mean square algorithm for solving ordinary differential equations	Elsevier (ISI): Neurocomputing: Impact	2011
6	A new fuzzy neural network model for solving fuzzy linear programming problems and its applications	Springer (ISI): Neural Computing and Applications	2010
7	Fuzzy Circuit Analysis	Journal name: IJAER	2008
8	Solving the Interval-Valued Linear Fractional Programming Problem	American Journal of Computational Mathematics, 2012, 2, 51-55	2012
9	Optimal control problem via neural networks	Springer (ISI): Neural Computing and Applications	2012

No	Title	Journal	Year
10	Bounds for convex quadratic programming problems and some important applications	International Journal of Operational Research	2015
11	Approximating the Solution of Optimal Control Problems by Fuzzy Systems	Springer (ISI): Neural Processing Letters	2015
12	On fuzzy linear projection equation and applications	Springer (ISI): Fuzzy optimization and decision making	2015
13	Fuzzy Projection Over a Crisp Set and Applications	Springer (ISI): International Journal of Fuzzy Systems	2016
14	A Neural Network Approach for Solving a Class of Fractional Optimal Control Problems	Springer (ISI): Neural Processing Letters	2016
15	Analysing the solution of production-inventory optimal control systems by neural networks	RAIRO - Operations Research	2016
16	Solving differential equations of fractional order within an optimization based on neural network	Elsevier (ISI): Applied Mathematics and Computation	2017
17	Exact and approximate solution for optimal inventory control of two-stock with reworking and forecasting of demand	Springer (ISI): Operational research	2017
18	Optimal control model for finite capacity continuous MRP with deteriorating items	Springer (ISI): Journal of Intelligent Manufacturing	2018
19	A new continuous time optimal control model for manpower planning with promotion from inside the system	Springer (ISI): Operational research	2018
20	A delayed optimal control model for multi-stage production-inventory system with production lead times	Springer (ISI): The International Journal of Advanced Manufacturing Technology	2018

Selected Projects:

No.	Title	Role	Year
1	Scheduling urban bus lines	Cooperator	2018
2	Applications of neural networks for optimal control models of inventory management	Cooperator	2017
3	Estimating the residential house price based on fuzzy logic	Cooperator	2017- 2019

No.	Title	Role	Year
4	Post processing the North American Multi-Model Ensemble	Principle	2018
	(NMME) over Iran by using neural networks	Investigator	
5	Prediction of Lightning based on data mining techniques	Principle	2019
		Investigator	
6	Monthly forecast of precipitation based on multi-model ensemble	Principle	2019
	approaches in a software, case study: selected European models	Investigator	
7	Developing Seasonal Climate Forecasting Toolkit	Cooperator	2018
8	ET estimation for Urumia lack catchment using outputs of	Cooperator	2019
	CFSv2 model and WNN		
9	Developing Seasonal Climate Forecasting Toolkit Version 2	Cooperator	2019
10	Post-processing of CFS.2-RegCM4 Regional Dynamical Climate	Cooperator	2019
	Prediction System for Some Climatological Variables over Iran		
	and Neighboring Countries		

Editor or Reviewer

No.	Task	Journal
1	Editorial Board member	SN Applied Sciences
2	Editorial Board member	Newsletter of Iranian fuzzy system society
3	Reviewer	SN Applied Sciences
4	Reviewer	Network: computation in neural systems
5	Outstanding Reviewer	Applied Soft Computing
6	Reviewer	Iranian Journal of Numerical Analysis and Optimization
7	Reviewer	Chaos: An Interdisciplinary Journal of Nonlinear Science
8	Reviewer	RAIRO-Operations Research
9	Outstanding Reviewer	Journal of computational and applied mathematics
10	Reviewer	Mathematical Reviews (American Mathematical Society)
11	Reviewer	International Journal of Fuzzy Systems
12	Reviewer	Transportation Research Part E: Logistics and Transportation Review
13	Reviewer	Journal of Computational and Applied Mathematics