Asst. Prof. ZEINAB HASSANZADEH

Personal Information

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International Researcher IDs
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Publons / Web Of Science ResearcherID: CUA-8498-2022
ScopusID: 56462901400
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Education Information

Post Doctorate, Istanbul Technical University, Fen-Edebiyat, Matematik Mühendisliği, Turkey 2022 - 2024
Doctorate, Geylan Üniversitesi, Faculty of Mathematical Sciences, Department of Applied Mathematics, Iran 2014 - 2019
Postgraduate, University of Mohaghegh, Faculty of Mathematical Sciences, Department of Applied Mathematics, Iran 2010 - 2012
Undergraduate, Tabriz University, Faculty of Mathematical Sciences, Department of Applied Mathematics, Iran 2004 - 2008

Foreign Languages

English, C1 Advanced
Azerbaijani, C2 Mastery
Turkish, C1 Advanced

Dissertations

Doctorate, Some improvements of the Monte Carlo method for solving fuzzy and crisp systems of linear equations, Geylan Üniversitesi, Faculty of Mathematical Sciences, Department of Applied Mathematics, 2019
Postgraduate, Two-stage waveform relaxation method for the initial value problems, University of Mohaghegh, Faculty of Mathematical Sciences, Department of Applied Mathematics, 2012

Research Areas

Numerical Algorithms, Biocomputing, Formal Languages, Database and Data Structures, Fuzzy Sets and Systems, Linear and Multilinear Algebra: Matrix Theory, Partial Differential Equations, Probability Theory, Stochastic Processes, Numerical Analysis

Academic Titles / Tasks

Assistant Professor, Istanbul Gelisim University, FACULTY OF ENGINEERING AND ARCHITECTURE, COMPUTER ENGINEERING, 2024 - Continues
Researcher, Istanbul Technical University, Fen-Edebiyat, Matematik Mühendisliği, 2022 - 2024
Lecturer PhD, Sahand University of Technology, 2019 - 2021
Lecturer, Geylan Üniversitesi, 2016 - 2019

Courses

Introduction to Computer Programming , Undergraduate, 2024 - 2025
Undergraduate, 2024 - 2025
İLERİ MODELLEME VE SİMÜLASYON, Postgraduate, 2024 - 2025
Object Oriented Programming, Undergraduate, 2024 - 2025
Undergraduate, 2024 - 2025
Probability and Statistics for Engineering, Undergraduate, 2019 - 2020
Computer Simulation of Statistical Distributions, Postgraduate, 2017 - 2018
Stochastic Processes, Postgraduate, 2016 - 2017
Programming with MATLAB, Undergraduate, 2015 - 2016
Numerical linear algebra, Undergraduate, 2014 - 2015

Advising Theses

Hassanzadeh Z., Soft computing and its industrial applications, Postgraduate, M.Adeli(Student), 2022
Hassanzadeh Z., Solving uncertain differential equations by Milne method, Postgraduate, A.Motamedi(Student), 2021

Designed Courses And Trainings

Hassanzadeh Z., An introduction to artificial neural networks, June 2019
Hassanzadeh Z., Application of novel optimization methods based on computational intelligence in engineering systems, August 2017
Hassanzadeh Z., An introduction to soft computing and fuzzy logic, April 2017

Published journal articles indexed by SCI, SSCI, and AHCI

I. **An integration of fuzzy inference and adaptive neural network applied for LSEG fuel price forecasting**
Hassanzadeh Z.
APPLIED SOFT COMPUTING JOURNAL, vol.4, no.2, pp.1-32, 2024 (SCI-Expanded)
II. **Monte Carlo method for the real and complex fuzzy system of linear algebraic equations**
Fathi-Vajargah B., Hassanzadeh Z.
Soft Computing, vol.24, no.2, pp.1255-1270, 2020 (SCI-Expanded)
III. **Improvements on the hybrid Monte Carlo algorithms for matrix computations**
Fathi-Vajargah B., Hassanzadeh Z.
Sadhana - Academy Proceedings in Engineering Sciences, vol.44, no.1, 2019 (SCI-Expanded)
IV. **A newton two-stage waveform relaxation method for solving systems of nonlinear algebraic equations**
Salkuyeh D. K., Hassanzadeh Z.
Mathematical Communications, vol.20, no.1, pp.1-15, 2015 (SCI-Expanded)

V. **Two-stage waveform relaxation method for the initial value problems with non-constant coefficients**
Hassanzadeh Z., Salkuyeh D. K.
Computational and Applied Mathematics, vol.33, no.3, pp.641-654, 2014 (SCI-Expanded)

Articles Published in Other Journals

I. **A new Monte Carlo method for solving system of linear algebraic equations**
Fathi-Vajargah B., Hassanzadeh Z.
Computational Methods for Differential Equations, vol.9, no.1, pp.159-179, 2021 (ESCI)
II. **Common fixed point theorem for the R-weakly commuting mappings in M-fuzzy metric spaces**
Hassanzadeh Z., Sedghi S., Kim J. K.
Nonlinear Functional Analysis and Applications, vol.23, no.4, pp.629-641, 2018 (Scopus)

Supported Projects

Hassanzadeh Z., TUBITAK Project, Simulation of the navigation lock systems by a new hybrid Monte Carlo method via machine learning algorithms, 2023 - 2024

Scientific Refereeing

SOFT COMPUTING, Journal Indexed in ESCI, June 2024
ANNALS OF OPERATIONS RESEARCH, Journal Indexed in ESCI, May 2024
SADHANA - ACADEMY PROCEEDINGS IN ENGINEERING SCIENCES, Journal Indexed in ESCI, August 2017

Metrics

Publication: 11
Citation (Scopus): 15
H-Index (Scopus): 3

Invited Talks

A new hybrid stochastic Monte Carlo linear solver to the desired modelling problems, Seminar, Galatasaray Üniversitesi, Turkey, February 2024
Turbulent flow modelling by an intelligent Monte Carlo method applied to solve RANS equations, Seminar, İstanbul Gelişim Üniversitesi, Turkey, February 2024
Impressive efficiency of a newly structured Monte Carlo linear solver on some modelling problems, Seminar, Marmara Üniversitesi, Turkey, December 2022
Two-stage waveform relaxation method for linear system of IVPs with non-constant HPD coefficient, Conference, University of Yazd, Iran, October 2015
On the solution of complex fuzzy system of linear equations with HPD coefficient matrix, Conference, University of Guilan, Iran, June 2015
New walk on equations Monte Carlo method for solving systems of linear algebraic equations, Seminar, University of Guilan, Iran, November 2014
Two-stage waveform relaxation method for the initial value problems, Conference, Shahid Madani University of Azerbaijan, Iran, July 2012