

Nasser Aghazadeh





Professor in Applied Mathematics

Department of Mathematics
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-  ResearcherID: Q-6551-2019
-  Scopus Author ID: 8937839000
-  orcid.org/0000-0003-2705-8942
-  Google Scholar

Education

- July 31, 2007 **Doctor of Philosophy (PhD): Applied Mathematics, Iran University of Science and Technology, Tehran, Iran**
Dissertation: Numerical Solution of Integral Equations of the First and Second Kind by Using Wavelets
Supervisor: Prof. Dr. Khosrow Maleknejad
- Nov 29, 2000 **Master of Science (MSc): Applied Mathematics, Iran University of Science and Technology, Tehran, Iran**
Thesis: Modified Taylor Series Expansion Method for a Class of Second Kind Integral Equations
Supervisor: Prof. Dr. Khosrow Maleknejad
- Sep 13, 1998 **Bachelor of Science (BSc): Applied Mathematics, University of Tabriz, Tabriz, Iran**

Current Research Interests

My research focuses on the following topics:

- Wavelet analysis and its applications
- Numerical solution of differential equations
- Mathematics for real-world applications
- Mathematical image processing, in particular, image segmentation, edge detection, image restoration, medical image processing

Journal Publications

- **Topology degree results on a G—ABC implicit fractional differential equation under three-point boundary conditions**, Miguel Vivas-Cortez, Shahram Rezapour, Sabri T.M. Thabet, Ava Sh. Rafeeq, Imed Kedim, Nasser Aghazadeh
Published 1 July 2024 in *PLOS ONE*
<https://doi.org/10.1371/journal.pone.0300590>
Science Citation Index Expanded, 2023 JIF: 2.9, JIF QUARTILE: Q1
- **An Iris Segmentation Scheme Based on Bendlets**, Nasser Aghazadeh, Mandana Abbasi, Parisa Noras
Published 31 December 2023 in *Signal, Image and Video Processing* 18 (2024) 2683–2693.
<https://doi.org/10.1007/s11760-023-02940-1>
Science Citation Index Expanded, 2023 JIF: 2.0, JIF QUARTILE: Q3
- **A Numerical Method Based on Legendre Wavelet and Quasilinearization Technique for Fractional Lane-Emden Type Equations**, Fatih İdiz, Gamze Tanoğlu, Nasser Aghazadeh,
Published: 14 June 2023 in *Numerical Algorithms* 95 (2024) 181–206.
<https://doi.org/10.1007/s11075-023-01568-z>
Science Citation Index Expanded, 2023 JIF: 1.7, JIF QUARTILE: Q2
- **Taylor Wavelets Collocation Technique for Treatment Fractional Nonlinear Singular PDEs**, Nasser Aghazadeh, Amir Mohammadi, Gamze Tanoglu,
Published: 12 July 2022, in *Mathematical Sciences* 18 (2024) 41–54,
<https://doi.org/10.1007/s40096-022-00483-z>
Science Citation Index Expanded, 2023 JIF: 21.9, JIF QUARTILE: Q1
- **Lung Parenchyma Segmentation from CT Images with a Fully Automatic Method**, Reza Mousavi Moghaddam, Nasser Aghazadeh,
Published: 04 July 2023 in *Multimedia Tools and Applications* 83 (2024) 14235–14257.
<https://doi.org/10.1007/s11042-023-16040-2>
Science Citation Index Expanded, 2023 JIF: 3.0, JIF QUARTILE: Q2
- **Constructing Multiwavelet-Based Shearlets and Using them for Automatic Segmentation of Noisy Brain Images Affected by Covid-19**, Nasser Aghazadeh, Paria Moradi, Parisa Noras,
Published: 12 July 2023 in *Journal of Medical Signals & Sensors*, 13(3) (2023) 183-190
https://doi.org/10.4103/jmss.jmss_29_22
Emerging Sources Citation Index, 2023 JIF: 1.3, JCI QUARTILE: Q4
- **Existence of the solution via an iterative algorithm for 2D fractional integral equations including an industrial application**, Rahul, Nihar Kumar Mahato, Mohsen Rabbani, Nasser Aghazadeh,
Published: 31 December 2023 in *Journal of Integral Equations and Applications*, 35(4) (2023) 459-472

<https://doi.org/10.1216/jie.2023.35.459>

Science Citation Index Expanded, 2023 JIF: 0.9, JIF QUARTILE: Q2

- **An Automatic MRI Brain Image Segmentation Technique Using Edge-Region Based Level Set**, Nasser Aghazadeh, Paria Moradi, Giovanna Castellano, Parisa Noras, Published: 27 Nov 2022 in *Journal of Supercomputing* 79 (2023) 7337–7359, <https://doi.org/10.1007/s11227-022-04948-9>
Science Citation Index Expanded, 2023 JIF: 2.5, JIF QUARTILE: Q2
- **On time fractional modified Camassa-Holm and Degasperis-Procesi equations by using the Haar wavelet iteration method**, Nasser Aghazadeh, Ghader Ahmadnezhad, Shahram Rezapour, Published: April 2023 in *Iranian Journal of Mathematical Sciences and Informatics* 18(1) (2023) 55-71, <https://doi.org/10.52547/ijmsi.18.1.55>
Emerging Sources Citation Index, 2023 JIF: 0.4, JIF QUARTILE: Q4
- **Chebyshev-Quasilinearization Method for Solving Singular Nonlinear Fractional Lane-Emden Equations**, Amir Mohammadi, Ghader Ahmadnezhad, Nasser Aghazadeh, Published: September 19, 2022 in *Communications in Mathematics* 30(1) (2022) 201-228, <https://doi.org/10.46298/cm.9895>
Scopus, CiteScore 2021: 0.4, QUARTILE: Q3
- **Existence of Solution of Functional Integral Equations by Measure of Noncompactness and Sinc Interpolation to Find Solution**, Mohsen Rabbani, Reza Arab, Bipan Hazarika and Nasser Aghazadeh, Published: Feb 1, 2022, in *Fixed Point Theory* 23(1) (2022) 331-350., <https://doi.org/10.24193/fpt-ro.2022.1.21>
Science Citation Index Expanded, 2022 JIF: 1.1, JIF QUARTILE: Q2
- **Solving partial fractional differential equations by using the Laguerre wavelet-Adomian method**, Nasser Aghazadeh, Amir Mohammadi, Ghader Ahmadnezhad, Shahram Rezapour, Published: 01 May 2021 in *Advances in Difference Equations* 2021 2021:231., <https://doi.org/10.1186/S13662-021-03388-8>
Science Citation Index Expanded, 2021 JIF: 3.761, JIF QUARTILE: Q1
- **A Three-Stage Shearlet-based algorithm for vessel segmentation in medical imaging**, Mahdi Mirzafam, Nasser Aghazadeh, Published: 6 Oct 2020, in *Pattern Analysis and Applications* 24 (2021) 591-610., <https://doi.org/10.1007/S10044-020-00915-3>
Science Citation Index Expanded, 2021 JIF: 2.307, JIF QUARTILE: Q3
- **Comparison of lumbar segmental stabilization and general exercises on clinical and radiologic criteria in grade-I spondylolisthesis patients: A double-blind randomized controlled**

trial, Mohammadimajid, Elaheh; Lotfinia, Iraj; Salahzadeh, Zahra; Aghazadeh, Nasser; et al, Published: 28 April 2020 in *Physiotherapy Research International* 2020; e1843, <https://doi.org/10.1002/PRI.1843>
Emerging Sources Citation Index, 2020 JCI: 0.84, JCI QUARTILE: Q2

- **Wavelet-Picard iterative method for solving singular fractional nonlinear partial differential equations with initial and boundary conditions**, Amir Mohammadi, Nasser Aghazadeh, Shahram Rezapour, Published: Nov 2020 in *Computational Methods for Differential Equations* 8(4) (2020) 610-638, <https://doi.org/10.22034/cmde.2020.31627.1479>
Emerging Sources Citation Index, 2020 JCI: 0.40, JCI QUARTILE: Q4
- **Haar wavelet iteration method for solving time fractional Fisher's equation**, Ghader Ahmadnezhad, Nasser Aghazadeh, Shahram Rezapour, Published: 2020 in *Computational Methods for Differential Equations* 8(3) (2020) 505-522, <https://doi.org/10.22034/CMDE.2020.31527.1475>
Emerging Sources Citation Index, 2020 JCI: 0.40, JCI QUARTILE: Q4
- **Newfangled Procedures Using X-ray to Determine the Cobb Angle in Patients with Scoliosis: An Updated Systematic Review**, Moftian, Nazila; Hachesu, Peyman Rezaei; Pourfeizi, Hojjat Hossein; Samad-Soltani, Taha; Aghazadeh, Nasser; et al, Published: Nov 2019 in *Current Medical Imaging* 15(10) (2019) 922-932, <https://doi.org/10.2174/1573405614666180531073300>
Science Citation Index Expanded, 2019 JIF: 0.812, JIF QUARTILE: Q4
- **Haar wavelet collocation method for solving singular and nonlinear fractional time-dependent Emden-Fowler equations with initial and boundary conditions**, Amir Mohammadi, Nasser Aghazadeh, Shahram Rezapour, Published: 27 Aug 2019 in *Mathematical Sciences* 13(3) (2019) 255-265, <https://doi.org/10.1007/S40096-019-00295-8>
Science Citation Index Expanded, 2019 JIF: 0.945, JIF QUARTILE: Q2
- **Joint Image Deconvolution and Separation Using Mixed Dictionaries**, Siadat, Medya; Aghazadeh, Nasser; Akbarifard, Farideh; Brismar, Hjalmar; Öktem Ozan, Published: 06 March 2019 in *IEEE Transactions on Image Processing* 28(8) (2019) 3936-3945, <https://doi.org/10.1109/TIP.2019.2903316>
Science Citation Index Expanded, 2019 JIF: 9.340, JIF QUARTILE: Q1
- **Existence Results and Numerical Solutions for a Multi-term Fractional Integro-differential Equation**, Aghazadeh, N.; Ravash, E.; Rezapour, Sh., Published: 2019 in *Kragujevac Journal of Mathematics* 43(3) (2019) 413-426
Scopus, CiteScore 2019: 1.2, QUARTILE: Q3
- **Directional Schemes for Edge Detection Based on B-spline Wavelets**, Noras, Parisa; Aghazadeh, Nasser,

Published: 19 January 2018 in *Circuits Systems and Signal Processing* (2018) 37(9) 3973-3994,
<https://doi.org/10.1007/S00034-018-0753-4>

Science Citation Index Expanded, 2018 JIF: 1.922, JIF QUARTILE: Q3

- **Reordering for improving global Arnoldi-Tikhonov method in image restoration problems**, Siadat, Medya; Aghazadeh, Nasser; Öktem, Ozan,
Published: 10 October 2017 in *Signal Image and Video Processing* (2018) 12(3) 497-504,
<https://doi.org/10.1007/S11760-017-1185-5>
Science Citation Index Expanded, 2018 JIF: 1.894, JIF QUARTILE: Q3

- **A multiphase segmentation method based on binary segmentation method for Gaussian noisy image**, Ladan Sharafyan Cigaroudy; Nasser Aghazadeh,
Published: 28 November 2016 in *Signal Image and Video Processing* (2017) 11(5) 825-831,
<https://doi.org/10.1007/S11760-016-1028-9>
Science Citation Index Expanded, 2017 JIF: 1.643, JIF QUARTILE: Q3

- **A new multiphase segmentation method using eigenvectors based on K real numbers**, Ladan Sharafyan Cigaroudy; Nasser Aghazadeh,
Published: 09 July 2016 in *Circuits Systems and Signal Processing* 36(4) (2017) 1445-1454,
<https://doi.org/10.1007/S00034-016-0359-7>
Science Citation Index Expanded, 2017 JIF: 1.998, JIF QUARTILE: Q2

- **A restoration-segmentation algorithm based on flexible Arnoldi-Tikhonov method and Curvelet denoising**, Aghazadeh, Nasser; Akbarifard, Farideh; Cigaroudy, Ladan Sharafyan,
Published: 24 November 2015 in *Signal Image and Video Processing* (2016) 10(5) 935-942,
<https://doi.org/10.1007/S11760-015-0843-8>
Science Citation Index Expanded, 2016 JIF: 1.102, JIF QUARTILE: Q3

- **Convergence of an Approach for Solving Fredholm Functional Integral Equations**, Nasser Aghazadeh; Somayeh Fathi,
Published: 2016 in *Iranian Journal of Mathematical Sciences and Informatics* (2016) 11(1) 35-46,
<https://doi.org/10.7508/IJMSI.2016.01.004>
Scopus, CiteScore 2016: 0.6, QUARTILE: Q3

- **Two-parameter generalized Hermitian and skew-Hermitian splitting iteration method**, Nasser Aghazadeh; Davod Khojasteh Salkuyeh; Mehdi Bastani,
Published: 12 Mar 2015 in *International Journal of Computer Mathematics* 93(7) (2016) 1119-1139,
<https://doi.org/10.1080/00207160.2015.1019873>
Science Citation Index Expanded, 2016 JIF: 0.971, JIF QUARTILE: Q2

- **Generalized Hermitian and skew-Hermitian splitting iterative method for image restoration**, Nasser Aghazadeh; Mehdi Bastani; Davod Khojasteh Salkuyeh,
Published: 15 October 2015 in *Applied Mathematical Modelling* 39(20) (2015) 6126-6138,

<https://doi.org/10.1016/J.APM.2015.01.042>

Science Citation Index Expanded, 2015 JIF: 2.291, JIF QUARTILE: Q1

- **Projection Methods for Solving Urysohn Integral Equations with Multiwavelet Bases**, Nasser Aghazadeh, Medya Siadat
Published: 2015 in *Malaysian Journal of Mathematical Sciences* 9(1) 111-125 (2015)
Scopus, CiteScore 2015: 1.4, QUARTILE: Q4

- **A multistep segmentation algorithm for vessel extraction in medical imaging**, Ladan Sharafyan Cigaroudy; Nasser Aghazadeh,
Published: Dec 2014 in *ArXiv*,
<https://doi.org/10.48550/arXiv.1412.8656>

- **The Legendre Wavelet Method for Solving Singular Integro-differential Equations**, Nasser Aghazadeh, Yaser Gholizade atani, Parisa Noras,
Published: 2014 in *Computational Methods for Differential Equations* (2014) 2(2) 62-68.

- **Solving nonlinear two-dimensional Volterra integro-differential equations by block-pulse functions**, Nasser Aghazadeh; Amir Ahmad Khajehnasiri,
Published: 2013 in *Mathematical Sciences*, 7(1) 1-6 (2013)
<https://doi.org/10.1186/2251-7456-7-3>

- **Aitken extrapolation and epsilon algorithm for an accelerated solution of weakly singular nonlinear Volterra integral equations**, H Mesgarani; N Aghazadeh; P Parmour,
Published: 29 January 2010 in *Physica Scripta* 81(2) (2010) 025006 (7pp),
<https://doi.org/10.1088/0031-8949/81/02/025006>
Science Citation Index Expanded, 2010 JIF: 0.985, JIF QUARTILE: Q2

- **A wavelet Petrov-Galerkin method for solving integro-differential equations**, K. Maleknejad; M. Rabbani; N. Aghazadeh; M. Karami,
Published: 23 Jul 2009 in *International Journal of Computer Mathematics* 86(9), 1572-1590, 2009,
<https://doi.org/10.1080/00207160801923056>
Science Citation Index Expanded, 2009 JIF: 0.478, JIF QUARTILE: Q4

- **Computational projection methods for solving Fredholm integral equation**, M. Rabbani; K. Maleknejad; N. Aghazadeh; R. Mollapourasl,
Published: 1 Aug 2007 in *Applied Mathematics and Computation* 191(1) (2007), 140-143,
<https://doi.org/10.1016/J.AMC.2007.02.071>
Science Citation Index Expanded, 2007 JIF: 0.821, JIF QUARTILE: Q2

- **Numerical computational solution of the Volterra integral equations system of the second kind by using an expansion method**, M. Rabbani; K. Maleknejad; N. Aghazadeh,
Published: 15 April 2007 in *Applied Mathematics and Computation* 187(2) (2007) 1143-1146,
<https://doi.org/10.1016/J.AMC.2006.09.012>

Science Citation Index Expanded, 2007 JIF: 0.821, JIF QUARTILE: Q2

- **Numerical solution of Fredholm integral equation of the first kind with collocation method and estimation of error bound**, K. Maleknejad; N. Aghazadeh; R. Mollapourasl, Published: 1 August 2006 in *Applied Mathematics and Computation* 179(1) (2006) 352–359, <https://doi.org/10.1016/J.AMC.2005.11.159>
Science Citation Index Expanded, 2006 JIF: 0.816, JIF QUARTILE: Q2
- **Numerical solution of second kind Fredholm integral equations system by using a Taylor-series expansion method**, Maleknejad, K; Aghazadeh, N; Rabbani, M, Published: 15 April 2006 in *Applied Mathematics and Computation* 175(2) (2006) 1229–1234, <https://doi.org/10.1016/J.AMC.2005.08.039>
Science Citation Index Expanded, 2006 JIF: 0.816, JIF QUARTILE: Q2
- **Numerical solution of Hammerstein equations via an interpolation method**, K. Maleknejad; M. Karami; N. Aghazadeh, Published: 1 September 2005 in *Applied Mathematics and Computation* 168(1) (2005) 141–145, <https://doi.org/10.1016/J.AMC.2004.08.031>
Science Citation Index Expanded, 2005 JIF: 0.688, JIF QUARTILE: Q2
- **Numerical solution of Volterra integral equations of the second kind with convolution kernel by using Taylor-series expansion method**, K. Maleknejad; N. Aghazadeh, Published: 25 February 2005 in *Applied Mathematics and Computation* 161(3) (2005) 915–922, <https://doi.org/10.1016/J.AMC.2003.12.075>
Science Citation Index Expanded, 2005 JIF: 0.688, JIF QUARTILE: Q2

Conference Papers

- Ladan Sharafyan Cigaroudy; Nasser Aghazadeh, A Binary Segmentation Algorithm Based on Shearlet Transform and Eigenvectors, Published: 2015 in 2nd International Conference on Pattern Recognition and Image Analysis (IPRIA2015), <https://doi.org/10.1109/PRIA.2015.7161618>
- Khosrow Maleknejad, Nasser Aghazadeh, Solving Nonlinear Hammerstein Integral Equations by Using B-spline Scaling Functions, Published: 2009 in World Congress on Engineering 2009, VOLS I AND II
- Nasser Aghazadeh, Yaser Gholizade atani and Parisa Noras, An Edge Detection Scheme with Legendre Multiwavelets, Proceeding of the 46th Annual Iranian Mathematics Conference (AIMC46), 1322-1325, 25-28 August 2015, Yazd University, Yazd, Iran
- Mehdi Bastani and Nasser Aghazadeh, On the generalized Hermitian and Skew-Hermitian Splitting Iterative Method for Image Restoration, Caucasian Mathematics Conference, CMC I, Tbilisi, Georgia, September 5 and 6, 2014.

- Yaser Gholizade atani and Nasser Aghazadeh, Edge Detection Based on Wavelet and Direction of Gradient, Caucasian Mathematics Conference, CMC I, Tbilisi, Georgia, September 5 and 6, 2014.
- Mehdi Bastani and Nasser Aghazadeh, GHSS iterative method for image restoration, Proceeding of the 43rd Workshop on Electrical and Computer Engineering Subfields, Istanbul, Turkey, August 2014, 190-193.
- Mehdi Bastani, Farideh Akbarifard and Nasser Aghazadeh, An application of a compact finite difference method in image denoising, Proceeding of the 43rd Annual Iranian Mathematics Conference, University of Tabriz, Tabriz, Iran, 27-30 August 2012, 534-537.
- Nasser Aghazadeh and Amir Ahmad Khajehnasiri, Solving high-order nonlinear Volterra integro-differential equations by using block-pulse functions, Proceeding of the 43rd Annual Iranian Mathematics Conference, University of Tabriz, Tabriz, Iran, 27-30 August 2012, 1284-1287.
- Nasser Aghazadeh and Medya Siadat, Galerkin Method for Solving Functional Integral Equations of Mixed Type, Proceeding of the 2nd International Conference on Mathematical Applications in Engineering (ICMAE2012) KL, Malaysia, 1-3 July, 2012, 342-345.
- Nasser Aghazadeh and Mehrdad Lakestani, Solving Nonlinear Fredholm-Hammerstein Integral Equations by Using Cardinal Legendre Functions, 4th Congress of the Turkic World Mathematical Society (TWMS) Baku, Azerbaijan, 1-3 July, 2011.
- Khosrow Maleknejad and Nasser Aghazadeh, Solving Hammerstein Integral Equations by Using B-Spline Scaling Functions, Proceedings of the World Congress on Engineering 2009 Vol I, WCE 2009, July 1-3, 2009, London, U.K.
- Nasser Aghazadeh, Using B-Spline Scaling Functions for Solving Integro-Differential Equations, 14th Conference on Difference Equations and Applications (ICDEA2008), July 21-25, 2008, Istanbul, Turkey.
- Nasser Aghazadeh and Khosrow Maleknejad, Using Quadratic B-Spline Scaling Functions for Solving Integral Equations, International Conference, Dynamical Systems and Applications, July 1-6, 2007, Selcuk, Kusadasi, Izmir, Turkey.
- Nasser Aghazadeh and Khosrow Maleknejad, Treatment of the First Kind Integral Equation by Projection Method with Wavelet Basis, International Congress of Mathematicians, 22-30 August 2006, Madrid, Spain.

Teaching Experiences

My years of teaching and lecturing can be divided into three periods. The current period at Izmir Institute of Technology, the period at Azarbaijan Shahid Madani University, Tabriz, Iran (ASMU) and the period before ASMU.

I joined the Izmir Institute of Technology in February, 2023. Since February 2023 I have been teaching some courses at Izmir Institute of Technology. (The official teaching language is English)

Spring 2024

MATH146	Calculus for Engineering and Science II	
MSE222	Applied Mathematics for MSE	
MATH416	Mathematical Research Project II	
CSE502	Numerical Methods and Scientific Programming II	Graduate

Fall 2023

MATH255	Differential Equations	
MATH539	Numerical Analysis	Graduate
MATH415	Mathematical Research Project I	
CSE501	Numerical Methods and Scientific Programming I	Graduate

Spring 2023

MATH382	Numerical Analysis II	
MATH590	Selected Topics in Applied Mathematics	Graduate
CSE502	Numerical Methods and Scientific Programming II	Graduate

Before that, I was a professor at ASMU, and I taught some courses for several years. For years at ASMU, I added my “teacher qualification” results (ME) compared to the university average (UNI) results. (According to the official documents from the university; the documents are in Persian and can be translated upon any request).

ME: my evaluation results according to the results extracted from the forms filled out by the students at my courses; scores are from 20.

UNI: the university average evaluation results according to the results extracted from the forms filled out by all students at the university; scores are from 20.

Fall 2022 **Visiting Professor**

Izmir Institute of Technology, Izmir, Türkiye

Spring 2022 **ME: 18.32/20 – UNI: 18.83/20**

Math-16512414	English for Math Students	
Math-16512103	Basics of Numerical Analysis	
Math-19223108	Wavelets and their Applications	Graduate

Fall 2021 **ME: 19.43/20 – UNI: 18.73/20**

Math-19223107	Approximation Theory	Graduate
Math-19213102	Advanced Numerical Analysis	Graduate

Spring 2021 **ME: 19.74/20 – UNI: 18.62 /20**

Math-19424102	Numerical Linear Algebra and Data Mining	Graduate
Math-19223108	Wavelets and their Applications	Graduate

Fall 2020	ME: 19.07/20 – UNI: 18.56/20		
	Math-19424007	Spectral Methods	Graduate
	Math-19223001	Advanced Numerical Analysis	Graduate
	Math-16512406	Numerical Analysis	
Spring 2020	ME: 18.73/20 – UNI: 18.04/20		
	Math-16512415	Mathematical Research Project	
	Math-19223115	Seminar	Graduate
	Math-19424102	Numerical Linear Algebra and Data Mining	Graduate
	Math-19223108	Wavelets and their Applications	Graduate
	Math-16512103	Basics of Numerical Analysis	
Fall 2019	ME: 19.49/20 – UNI: 18.87 /20		
	Math-19424007	Spectral Methods	Graduate
	Math-19223107	Approximation Theory	Graduate
	Math-19213102	Advanced Numerical Analysis	Graduate
	Math-16512406	Numerical Analysis	
Spring 2019	ME: 19.42/20 – UNI: 18.85/20		
	Math-19424102	Numerical Linear Algebra	Graduate
	Math-19223108	Wavelets and their Applications	Graduate
	Math-16512415	Mathematical Research Project	
	Math-16512103	Basics of Numerical Analysis	
Fall 2018	ME: 19.79/20 – UNI: 18.96/20		
	Math-19424007	Spectral Methods	Graduate
	Math-19223107	Approximation Theory	Graduate
	Math-19223115	Seminar	Graduate
	Math-19223001	Advanced Numerical Analysis	Graduate
Spring 2018	ME: 19.92/20 – UNI: 18.81/20		
	Math-19014104	Operator Theory I	Graduate
	Math-19014537	Topics in Operator Theory	Graduate
	Math-19223108	Wavelets and their Applications	Graduate
Fall 2017	Visiting Professor		
	Technische Universität Berlin, Berlin, Germany		
Spring 2017	Visiting Professor		
	Technische Universität Berlin, Berlin, Germany		
Fall 2016	ME: 20/20 – UNI: 18.81/20		
	Math-19014015	Advanced Linear Algebra	Graduate
	Math-19014104	Operator Theory I	Graduate

Spring 2016	ME: 18.20/20 – UNI: 18.86/20		
	Math-19014104	Operator Theory I	Graduate
	Math-19213004	Seminar	Graduate
Fall 2015	ME: 19.13/20 – UNI: 18.92/20		
	Math-19014516	Hyperbolic Partial Differential Equations	Graduate
	Math-19014524	Ordinary and singular integral equations	Graduate
Spring 2015	ME: 19.82/20 – UNI: 18.96/20		
	Math-19014106	Special Topics in Operator Theory	Graduate
	Math-19213206	Approximation Theory	Graduate
Fall 2014	ME: 18.11/20 – UNI: 18.97/20		
	Math-19014524	Ordinary and singular integral equations	Graduate
	Math-19113002	Seminar	Graduate
	Math-19213004	Seminar	Graduate
	Math-19113412	Advanced Numerical Analysis	Graduate
Spring 2014	ME: 19.91/20 – UNI: 18.83/20		
	Math-19014516	Hyperbolic Partial Differential Equations	Graduate
	Math-19213004	Seminar	Graduate
	Math-19213206	Approximation Theory	Graduate
Fall 2013	ME: 18.90/20 – UNI: 18.93/20		
	Math-19014524	Ordinary and singular integral equations	Graduate
	Math-19213004	Seminar	Graduate
	Math-19213102	Advanced Numerical Analysis	Graduate
Spring 2013	ME: 19.76/20 – UNI: 18.75/20		
	Math-19014516	Hyperbolic Partial Differential Equations	Graduate
	Math-31328200	Mathematical Research Project	
	Math-19113004	Seminar	Graduate
	Math-19213206	Approximation Theory	Graduate
Fall 2012	ME: 19.75/20 – UNI: 18.74/20		
	Math-19213204	Numerical Solution of Integral Equations	Graduate
	Math-31328200	Mathematical Research Project	
	Math-19213004	Seminar	Graduate
	Math-19014524	Ordinary and singular integral equations	Graduate
Spring 2012	ME: 19.17/20 – UNI: 18.61/20		
	Math-19014516	Hyperbolic Partial Differential Equations	Graduate
	Math-31328200	Mathematical Research Project	
	Math-19213206	Approximation Theory	Graduate

Fall 2011	ME: 18.42/20 – UNI: 18.4/20		
	Math-31921711	Numerical Analysis I	
	Math-19213204	Numerical Solution of Integral Equations	Graduate
	Math-19213004	Seminar	Graduate
	Math-19014524	Ordinary and singular integral equations	Graduate
Spring 2011	ME: 18.76/20 – UNI: 18.42/20		
	Math-19213102	Advanced Numerical Analysis I	Graduate
	Math-31328200	Bachelor Research Project	
	IT-13812003	Differential Equations	
	Math-31920510	Differential Equations	
Fall 2010	N/A		
	Math-31328901	Mathematics Laboratory I	
	Math-31921711	Numerical Analysis I	
	Math-19213102	Advanced Numerical Analysis	Graduate
	Math-31328200	Mathematical Research Project	
	Math-19213004	Seminar	Graduate
	Math-19213206	Approximation Theory	Graduate
Spring 2010	N/A		
	Math-31921711	Numerical Analysis I	
	Math-31328200	Mathematical Research Project	
	Math-19213203	Numerical Solution of ODEs	Graduate
	IT-13812001	Calculus I	
	Chem-33020101	Calculus I	
	Math-31921210	Basics of Computer and Programming	
	Math-19014524	Ordinary and singular integral equations	Graduate
	Math-31920510	Differential Equations	
Fall 2009	N/A		
	Math-31328901	Mathematics Laboratory I	
	Math-31224012	Numerical Analysis II (group A)	
	Math-31224012	Numerical Analysis II (group B)	
	Phys -32220050	Differential Equations	
	Chem-33020300	Differential Equations	
	Math-19213206	Approximation Theory	Graduate
Spring 2009	N/A		
	Math-31328901	Mathematics Laboratory I (group A)	
	Math-31328901	Mathematics Laboratory I (group B)	
	Math-31328901	Mathematics Laboratory I (group C)	
	Math-31921711	Numerical Analysis I	
	Math-19213204	Numerical Solution of Integral Equations	Graduate
	Math-19213206	Approximation Theory	Graduate

Fall 2008	N/A		
	Math-31328901	Mathematics Laboratory I (group A)	
	Math-31328901	Mathematics Laboratory I (group B)	
	Math-31921711	Numerical Analysis I	
	Math-19213102	Advanced Numerical Analysis	Graduate
	Math-19213204	Numerical Solution of Integral Equations	Graduate
	Civil -14522600	Numerical Computation	
Spring 2008	N/A		
	Math-31920510	Differential Equations (group A)	
	Math-31920510	Differential Equations (group B)	
	Math-31921210	Basics of Computer and Programming (group A)	
	Math-31921210	Basics of Computer and Programming (group B)	
	Math-31328901	Mathematics Laboratory I	
Fall 2007	N/A		
	Civil -14522600	Numerical Computation (group A)	
	Civil -14522600	Numerical Computation (group B)	
	Chem-33020300	Differential Equations	
	Mech-18822001	Calculus I	

From 2004 till 2007, exactly before securing a position at ASMU, I had been teaching at the following universities as a part-time lecturer:

2008-2009	Part-time lecturer, Payame Noor University, Tabriz, Iran		
	Advanced Numerical Analysis		graduate
2005-2007	Part-time lecturer, Islamic Azad University, South Tehran Branch, Tehran, Iran		
	Numerical Computation		undergraduate
	Calculus I		undergraduate
	Differential Equations		undergraduate
2005-2007	Part-time lecturer, Shahid Rajaei University, Tehran, Iran		
	Numerical Computation		undergraduate
	Numerical Analysis		undergraduate
	Calculus I		undergraduate
	Mathematics Laboratory		undergraduate
2004-2006	Part-time lecturer, University of Applied Science and Technology, Tehran, Iran		
	Numerical Computation		undergraduate
	Calculus I		undergraduate
	Computer Laboratory		undergraduate
	Basics of Computer		undergraduate
2004-2005	Part-time lecturer, Iran University of Science and Technology, Tehran, Iran		
	Numerical Computation		undergraduate

Supervised PhD Students

- PhD candidate **Shirin Khezri**, *Segmentation of Medical Images Using a Fuzzy Clustering Method based on Weighting and Mean Membership Linking Using Wavelet-Contourlet Transform*
2nd-supervisor: Dr. Mehdi Hashemzadeh, Co-adviser: Dr. Parisa Noras, Dr. Amin Golzari
- PhD candidate **Arezu Najafi Moghaddam**, *Medical image segmentation using a fuzzy clustering method based on feature weighting and cluster weighting using curvelet transformation*
2nd-supervisor: Dr. Mehdi Hashemzadeh, Co-adviser: Dr. Parisa Noras, Dr. Amin Golzari
- PhD candidate **Leila Pourreza Babil**, *Accurate diagnosis of breast tissue masses in mammographic images using fuzzy logic in image quality enhancement, image segmentation and lesions border detection processes*
2nd-supervisor: Dr. Mehdi Hashemzadeh
- PhD candidate **Roya Roshan**, *An image compression method based on combining of deep learning and classic methods*
2nd-supervisor: Dr. Nasser Farajzadeh, Co-adviser: Dr. Parisa Noras
- PhD candidate **Ruhollah Moatemedi**, *Segmentation of Mammographic Images Using Fractional Hessian Matrix and Fractional Order Derivative Based Active Contour Model*
2nd-supervisor: Dr. Mehdi Hashemzadeh, Co-adviser: Dr. Parisa Noras
- PhD candidate **Abdollah Sarafraz**, *A Geometric Method for Degraded Medical Image Inpainting by Using Digital Shearlet Transform*
2nd-supervisor: Dr. Mehdi Hashemzadeh, Co-adviser: Dr. Parisa Noras
- PhD candidate **Sevda Moghadasi**, *The Investigation of Multiresolution Approaches for Chest X-ray Images Based COVID-19 Detection*
Co-adviser: Dr. Parisa Noras
- February 04, 2024 **Mandana Abbassi**, *Iris Detection Based on Contour Features Extraction by Bendlets*
Co-adviser: Dr. Parisa Noras
- July 18, 2023 **Reza Mousavi Moghadam**, *Extracting the Target Regions of Pulmonary CT-Scan Images Using Regional-Based Active Contours*
Co-adviser: Professor Hadi Seyedarabi (University of Tabriz, Tabriz, Iran)
- March 14, 2023 **Paria Moradi**, *Brain MRI Image Segmentation with Energy Function based on region*
Co-adviser: Professor Giovanna Castellano (University of Bari, Italy), Dr. Parisa Noras
- October 13, 2020 **Mehdi Mirzafam**, *Segmentation of Magnetic Resonance Angiography Images for Extraction of Blood Vessels Based on Shearlets*
Co-adviser: Professor M. Poureisa (Tabriz University of Medical Sciences, Tabriz, Iran)

- September 17, 2019 **Parisa Noras**, *Edge Detection of Medical Images Based on Shearlets*
- September 17, 2019 **Ghader Ahmadnezhad**, *Numerical solutions of fractional Camassa-Holm and Fisher equations by using wavelet*
2nd-supervisor: Professor Shahram Rezapour
- September 17, 2019 **Amir Mohammadi**, *Numerical solution of some singular fractional partial differential equations by using wavelet*
2nd-supervisor: Professor Shahram Rezapour
- June 19, 2018 **Elahe Ravash**, *Analysis and treatment of fractional differential and integro-differential equations with multiwavelets method*
Co-adviser: Professor Shahram Rezapour
- October 4, 2017 **Medya Siadat**, *Applications of mixed representation systems in image separation*
Co-adviser: Professor Ozan Öktem (KTH Royal Institute of Technology, SE-100 44, Stockholm, Sweden)
- January 24, 2017 **Yaser Gholizade atani**, *Edge detection using B-spline wavelets*
- July 5, 2016 **Ladan Sharafyan Cigaroudy**, *Image segmentation with some mathematical methods for extraction of target objects*
- September 22, 2015 **Farideh Akbarifard**, *Application of some numerical methods in image restoration with different boundary conditions*
- April 15, 2015 **Mehdi Bastani**, *Image restoration by solving linear system of equations based on HSS iterative method*
Co-adviser: Prof. D. Khojasteh Salkuyeh (University of Guilan, Rasht, Iran)

Supervised Master Students

- in progress **Amin Hassanzadeh**, *Automated Mitosis Detection in Histopathology Based on Non-Gaussian Modeling of Complex Wavelet Coefficients*
- February 04, 2024 **Faranak Forough Bagheri**, *Automatic Segmentation of Brain Tumors in Magnetic Resonance Imaging by Integrating Anisotropic Filtering, Level Set Methods and Convolutional Neural Networks*
- Jan 15, 2023 **Elham Mahinjafarzadeh**, *Automatic and fast segmentation of medical images based on level set method using fuzzy clustering and split Bergman method*
- Sep 9, 2020 **Nader Belalzadeh**, *Multiscale Edge Detection Using First-Order Derivative of Anisotropic Gaussian Kernels*

- Oct 22, 2019 **Arezu Najafi Moghadam**, *Binary Spherical Image Segmentation Using Directional Wavelets*
- Oct 22, 2019 **Zahra Salim rushti**, *A New Class of Wavelet-Based Metrics for Image Similarity Assessment*
- Oct 22, 2019 **Ziba Kolahduzi pour**, *Image Segmentation by a Novel Binary Level Set Variational Model*
- Oct 9, 2018 **Mohamad Habibi**, *An optimization approach to detecting continuous, thin and smooth edges in noisy images*
- May 12, 2018 **Zeinab Abdollahi**, *Some Mathematical Methods for Medical Image Segmentation*
- Sep 6, 2016 **Abdollah Sarafraz**, *A Shearlet approach to image edge analysis and detection*
- Aug 22, 2016 **Ahmad Meihami**, *Comparison of various Edge Detection Techniques used in Image Processing*
- Aug 22, 2016 **Saleh Sharifi**, *Accurate Subpixel Edge Location based on Partial Area Effect*
- Sep 6, 2016 **Zahra Rezaei Shamasbi**, *An edge-preserving multilevel method for deblurring, Denoising and segmentation*
- 28 Feb 2016 **Zahra Safari bolboli**, *New model for image restoration with different boundary conditions*
- 28 Feb 2016 **Roqaye Alipour tazekandi**, *Embedded techniques for choosing the parameter in Tikhonov regularization*
- 6 Oct 2015 **Paria Moradi**, *Image processing with Shearlet systems*
- 22 Sep 2015 **Reza Mousavi Moghadam**, *Image processing with curvelet transforms*
- 17 Feb 2015 **Afsaneh Ghasemkhani ghadim**, *Kronecker Product and SVD approximations in image restoration*
- Dec 15, 2014 **Sajad Ektesabi bonab**, *Sylvester Tikhonov- regularization methods in image restoration*
- Sep 21, 2014 **Elaheh Ebrahimi yazdabadi**, *Kronecker Product Approximations for Image Restoration with Anti Reflective Boundary Condition*
- Sep 21, 2014 **Reyhaneh Naghipour nasirabadi**, *Box Spline Wavelet Frames for Image Edge Analysis*
- Feb 13, 2014 **Fatemeh Azarnia**, *Taylor polynomial solutions of nonlinear Volterra–Fredholm integral equations*
(Islamic Azad University)
- Dec 18, 2013 **Roya Roshan**, *A New Direct Method for Solving Nonlinear Volterra-Fredholm-Hammerstein Integral Equations via Optimal Control Problem*
(Payam-e-Noor University)
- Oct 6, 2013 **Mohammad Reza Gholypour**, *A random integral quadrature method for numerical analysis of the second kind of Volterra integral equation*
- Sep ?, 2013 **Leili Safakish**, *Cubic Spline Wavelets with Complementary Boundary Conditions*
(Islamic Azad University)
- July 9, 2013 **Sakineh Nasrollahi**, *Legendre approximation solution for a class of higher order integro-differential equation*

- June 30, 2013 **Parisa Noras**, *The Legendre wavelet method for solving initial value problems of Bratu-type*
- June 30, 2013 **Maryam Norouzi**, *New algorithms for the numerical solution of nonlinear Fredholm and Volterra integral equations using Haar wavelets*
- Feb 26, 2013 **Elham Nikjoo**, *Fast wavelet Galerkin methods for solving integral equations of the second kind*
- Feb 26, 2013 **Reyhaneh Ghiasi**, *Fast Multiresolution Algorithms and Their Related Variational Problems for Image Denoising*
- Oct 1, 2012 **Mehdi Mirzafam**, *Trigonometric Hermite wavelet approximation for the integral equation of second kind with weakly singular kernel*
- Oct 1, 2012 **Amir Mohammadi**, *Multi-projection methods for Fredholm integral equations of the second kind*
- Sep 15, 2012 **Safoura Hashemi**, *Numerical Solutions of Some Linear and Nonlinear Fredholm Integral Equations Using Bernstein Polynomials*
(Islamic Azad University)
- Sep 15, 2012 **Fatemeh Mahmoudi**, *Solving Some Volterra Integral Equations with Smooth and Weakly Singular kernel*
(Islamic Azad University)
- Sep 15, 2012 **Mitra Zand Mashayekhi**, *Derivatives of Bernstein Polynomials and their Application for solving High Even-Order Differential Equations*
(Islamic Azad University)
- July 14, 2012 **Nayer Gholestani**, *Hybrid function method for solving Fredholm and Volterra integral and integro-differential equations*
(Payam-e-Noor University)
- July 14, 2012 **Mansoureh Esmaili hajitalu**, *Sinc-Galerkin solution for nonlinear two-point boundary value problems with applications to chemical reactor theory*
(Payam-e-Noor University)
- April 26, 2012 **Amir Ahmad Khajehnassiri**, *A fast numerical solution method for two dimensional Fredholm integral equations of the second kind*
(Payam-e-Noor University)
- Sep 18, 2011 **Sedigheh Mohammadi**, *Homotopy perturbation method with some modifications for solving some integral and differential equations and comparison with homotopy analysis method*
- Sep 17, 2011 **Azadeh Omid**, *Some numerical methods for second kind Fredholm integral equations on the real semiaxis*
- Sep 17, 2011 **Farhad Ghorbani**, *Numerical solution of integral equations by means of the Sinc collocation method based on the double exponential transformation*
- Sep 17, 2011 **Ghader Ahmadnezhad**, *Using variational iteration method for solving some kind of integral and differential equation*
- Sep 28, 2010 **Shirin Khezri**, *Wavelet Numerical Solutions for Weakly Singular Fredholm Integral Equations of the Second Kind*

- July 21, 2010 **Medya Siadat**, *Wavelet applications to the Petrov-Galerkin method for Hammerstein equation*
- July 21, 2010 **Mina Shokraie**, *Approximation of Parabolic Integro-Differential Equations Using Wavelet-Galerkin Technique*
- July 11, 2009 **Elahe Ravash**, *Using Petrov-Galerkin Method for Solving Integral Equation of the Second Kind*

Memberships

Iranian Mathematical Society
American Mathematical Society

Administrative Experiences

- Feb 3, 20 – **Head of Education Department**
June 21, 21 Azarbaijan Shahid Madani University, Tabriz, Iran
- Jan 23, 19 – **Head of Department, Department of Mathematics**
April 07, 20 Azarbaijan Shahid Madani University, Tabriz, Iran
- Aug 11, 18 – **Head of Department, Department of Applied Mathematics**
Jan 23, 19 Azarbaijan Shahid Madani University, Tabriz, Iran
- Oct 2014 – **Vice-Chancellor of Administrative Staff and Financial Affairs**
May 2016 Azarbaijan Shahid Madani University, Tabriz, Iran
- Jan 2014 – **Founder and Head of the Image Processing Laboratory**
present Department of Mathematics, Azarbaijan Shahid Madani University, Tabriz, Iran
- Jan 2014 – **Dean of Faculty of Basic Sciences**
Oct 2014 Azarbaijan Shahid Madani University, Tabriz, Iran
- Nov 2011 – **Head of Research Department**
Jan 2014 Azarbaijan Shahid Madani University, Tabriz, Iran
- Nov 2010 – **Head of Industrial Relations Department**
Nov 2011 Azarbaijan Shahid Madani University, Tabriz, Iran
- Nov 2010 – **Co-Head of Department of Mathematics**
Jan 2011 Azarbaijan Shahid Madani University, Tabriz, Iran
- 2007 **Member of National Arbitration Committee**
Kharazmi Festival, Tehran, Iran

2006 **Member**

Department of Mathematics and Informatics Organization for Educational Research and Planning, Ministry of Education, Iran

2007 - 2013 **Local Representative, Iranian Mathematical Society**

Azarbaijan Shahid Madani University, Tabriz, Iran

Professional Experiences

Nov. 06, **Member**

2023 - present Department of Computational Science and Engineering, Izmir Institute of Technology, Izmir, Türkiye

Feb. 16, **Associate Professor**

2023 - present Department of Mathematics, Izmir Institute of Technology, Izmir, Türkiye

Sep. 18, **Visiting Professor**

2022 - Feb. 15, 2023 Department of Mathematics, Izmir Institute of Technology, Izmir, Türkiye

Feb 5, 2018 – **Professor**

Present Azarbaijan Shahid Madani University, Tabriz, Iran

Dec 09, 18 – **Member of Board of Auditors**

Mar 20, 21 Azarbaijan Shahid Madani University, Tabriz, Iran

Dec 10, 2016 **Visiting Professor**

– Dec 10, 2017 Technische Universität Berlin, Berlin 10623, Germany

Feb 5, 2013 – **Member of Specialized Commission of the Board of Auditors, Mathematics and Physics sections**

Feb 4, 2018 Azarbaijan Shahid Madani University, Tabriz, Iran

Feb 5, 2013 – **Associate Professor**

Feb 4, 2018 Azarbaijan Shahid Madani University, Tabriz, Iran

2012 – **Member, Research Group of Processing and Communication**

Present Azarbaijan Shahid Madani University, Tabriz, Iran

2008-2009 **Part-time lecturer**

Payame Noor University, Tabriz, Iran

Aug 2007 - **Assistant Professor**

Feb 2013 Azarbaijan Shahid Madani University, Tabriz, Iran

- 2005-2007 **Part-time lecturer**
Islamic Azad University, South Tehran Branch, Tehran, Iran
- 2005-2007 **Part-time lecturer**
Shahid Rajaee University, Tehran, Iran
- 2004-2006 **Part-time lecturer**
University of Applied Science and Technology, Tehran, Iran
- 2004-2005 **Part-time lecturer**
Iran University of Science and Technology, Tehran, Iran

Organization Activities

- July 20-21, 2016 **Member of scientific committee**, *The 6th Seminar on Numerical Analysis and Its Applications*
University of Maragheh, Maragheh, Iran
- May 27-29, 2015 **Member of scientific committee**, *12th seminar on differential equations and dynamical systems*
University of Tabriz, Tabriz, Iran
- Aug 26 - 29, 2014 **Member of scientific committee**, *33rd annual conference of Iranian Mathematics Society*
University of Semnan, Semnan, Iran
- Aug 27-30, 2012 **Member of scientific committee**, *34th annual conference of Iranian Mathematics Society*
University of Tabriz, Tabriz, Iran
- July 11-13, 2012 **Member of scientific committee**, *9th seminar on differential equations and dynamical systems*
Azarbaijan Shahid Madani University, Tabriz, Iran
- July 11-13, 2012 **Chair of organizing committee**, *9th seminar on differential equations and dynamical systems*
Azarbaijan Shahid Madani University, Tabriz, Iran
- July 18-19, 2011 **Chair of organizing committee**, *1st Regional seminar of mathematics students*
Azarbaijan Shahid Madani University, Tabriz, Iran

Verified Reviews (According to the Web of Science™)

According to the Web of Science™, I have 154 Verified peer reviews at the following journals (sorted according to the number of reviews):



Machine Vision and Applications, Signal, Image and Video Processing, Journal of Computational and Applied Mathematics, Mathematical Sciences, Computational Methods for Differential Equations, Biomedical Signal Processing and Control, IEEE Access, EURASIP Journal on Image and Video Processing, International Journal of Computer Mathematics, Journal of Applied Mathematics and Computing, Progress in Artificial Intelligence, Journal of Mathematics, Mathematical Modeling and Analysis, Mathematical Reviews, The Journal of Supercomputing, Abstract and Applied Analysis, Applied Mathematics and Computation, Applied Numerical Mathematics, Applied Research, Engineering Computations, Filomat, IEEE Intelligent Transportation System Magazine, International Journal of Mathematical Modelling & Computations, International Journal of Systems Science, Journal of Advanced Research in Scientific Computing, Journal of Mathematical Modeling, Journal of Taibah University of Science, Sahand Communication in Mathematical Analysis, Thai Journal of Mathematics, Walailak Journal of Science and Technology.

For an updated version, scan the QR code or click [here](#).

PhD Dissertation Examination

Since July 2011, I was a referee of the doctoral dissertation of a number of students in different universities as follows (in reverse order):

- September 13, 2023 **Zahra Shafinejhad**, *Flatlet oblique Multiwavelet method for solving differential and integral equations*, University of Mohaghegh Ardabili
Supervisor: Prof. Mohammad Zarebnia
- January 11, 2023 **Van Tiep Do**, *Theoretical analysis of image separation and image inpainting: A compressed sensing approach*, Technische Universität Berlin, Berlin, Deutschland
Supervisor: Prof. Dr. Gitta Kutyniok
- July 04, 2022 **Farshad Mehdifar**, *Numerical solution of a class of two-dimensional integral equations via the Boubaker polynomials*, Azarbaijan Shahid Madani University
Supervisor: Dr. Ali Khani
- May 19 2021 **Majid Bagheri**, *Analytical method for solving some fractional partial differential equations by using beta-fractional derivative*, Azarbaijan Shahid Madani University
Supervisor: Dr. Ali Khani
- January 31, 2021 **Asma Beiranvand**, *Numerical method of orthogonal basis functions for pricing new models of financial derivatives*, Shahid Rajaei University
Supervisor: Prof. Hamid Mesgarani
- September 20, 2020 **Roghayeh Hosseinzadeh**, *Numerical solution of fuzzy integral equation and fuzzy image processing*, University of Mohaghegh Ardabili
Supervisor: Prof. Mohammad Zarebnia

- August 04, 2020 **Fatemeh Jahanshahi khezerlou**, *Spectral and contour integral methods for investigating and solving initial-boundary value problems including fractional partial differential equations*, Azarbaijan Shahid Madani University
Supervisor: Prof. Mohammad Jahanshahi
- September 22, 2019 **Hamideh Ghafouri estiar**, *Numerical solution of fractional partial differential equation and its application in financial mathematics*, Azarbaijan Shahid Madani University
Supervisor: Prof. Dr Khani & Dr. Mojtaba Ranjbar
- September 15, 2019 **Saeid Panahi**, *Using the ultraspherical functions for solving fractional order differential and integro-differential equation*, Azarbaijan Shahid Madani University
Supervisor: Dr. Ali Khani
- September 08, 2019 **Maryam Derakhshan**, *Solution of integral equations using spline quasi-interpolant method*, University of Mohaghegh Ardabili
Supervisor: Prof. Mohammad Zarebnia
- September 03, 2019 **Asef Mousalou**, *Investigation of Some integro-differential equations involving the Caputo-Fabrizio derivative*, Azarbaijan Shahid Madani University
Supervisor: Prof. Shahram Rezapour
- June 18, 2019 **Mohammad Reza Azizi**, *Numerical solution of fractional order differential equations by operational matrix of sinc functions*, Azarbaijan Shahid Madani University
Supervisor: Dr. Ali Khani
- May 30, 2018 **Somayeh Abdi-mazraeh**, *Efficient spectral methods for numerical solution of option pricing*, Azarbaijan Shahid Madani University
Supervisor: Dr. Ali Khani
- May 16, 2018 **Somayeh Pourghanbar**, *Investigating solutions of linear and nonlinear problems and its application in financial mathematics*, Azarbaijan Shahid Madani University
Supervisor: Dr. Ali Khani
- April 05, 2016 **Leila Khodayari**, *Numerical methods on multi-asset option pricing problems*, Azarbaijan Shahid Madani University
Supervisor: Dr. Mojtaba Ranjbar
- January 30, 2016 **Leila Shiri**, *Numerical solution of delay integral equations*, University of Mohaghegh Ardabili
Supervisor: Prof. Mohammad Zarebnia
- October 20, 2015 **Zahra Nazemi**, *Investigation on the existence of solution of some fractional differential equations, systems and inclusions by using fixed point theory*, Azarbaijan Shahid Madani University
Supervisor: Prof. Shahram Rezapour

- April 14, 2015 **Davoud Nazari susahab**, *Analytical-numerical methods for solving including fractional differential equations boundary value problems*, Azarbaijan Shahid Madani University
Supervisor: Prof. Mohammad Jahanshahi
- January 18, 2014 **Hakimeh Mohammadi**, *Solutions of fractional differential equations by using fixed point theory*, Azarbaijan Shahid Madani University
Supervisor: Prof. Alireza Ghaffari-Hadigheh, Prof. Shahram Rezapour
- October 3, 2013 **Ali Karam Ezzeddine**, *Extension of stability region of numerical methods for solving IVPs*, University of Tabriz
Supervisor: Prof. Gholamreza Hojjati
- February 19, 2013 **Mojtaba Sajadmanesh**, *Investigation and reduction of the direct and inverse boundary value problems to Fredholm integral equations of the second kind*, Azarbaijan Shahid Madani University
Supervisor: Prof. Mohammad Jahanshahi
- July 18, 2012 **Safar Irandoust Pakchin**, *Efficient methods for numerical solution of nonlinear fractional differential equations*, University of Tabriz
Supervisor: Prof. Hossein Kheiri
- July 11, 2011 **Parviz Darania**, *The modification of advanced numerical methods for integral and integro-differential equations*, University of Tabriz
Supervisor: Prof. Karim Ivaz

References

Khosrow Maleknejad, *Professor in Applied Mathematics*, Iran University of Science and Technology, Tehran, Iran

email: maleknejad[at]iust.ac.ir

Behrouz Emamizadeh, *Professor in Mathematics*, University of Nottingham Ningbo China, Ningbo, China

email: Behrouz.Emamizadeh[at]nottingham.edu.cn

Shahram Rezapour, *Professor in Mathematics*, Azarbaijan Shahid Madani University, Tabriz, Iran

email: sh.rezapour[at]azaruniv.ac.ir

Ali Bajravani, *Associate Professor in Mathematics*, Azarbaijan Shahid Madani University, Tabriz, Iran

email: bajravani[at]azaruniv.ac.ir

Languages

Persian Native Speaker
Azerbaijani Native Speaker
English Reading, Listening and Writing (Advanced), Speaking (High-Intermediate)
(according to the TOEFL score report 2022)
Turkish B1 taken in General Directorate of Lifelong Learning, Ministry of Education, Türkiye
Deutsch Beginner

Last updated: August 5, 2024