

# Rezvan Salehi

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## CONTACT

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## CURRENT POSITION

September 2015-Now	<b>Assistant Professor of Mathematics, Numerical Analysis</b> Tarbiat Modares University, Tehran, Iran.
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## EDUCATION

2009-2013	<b>Received Ph.D. in Applied Mathematics, Numerical Analysis</b> Amirkabir University of Technology (AUT), Iran. Supervisor: Dr. Mehdi Dehghan Thesis Title: Development of reproducing kernel Meshless method and boundary techniques for solving partial differential equations
2007-2009	<b>Received M.Sc. in Applied Mathematics, Numerical Analysis</b> Amirkabir University of Technology (AUT), Iran. Supervisor: Dr. Mehdi Dehghan Thesis Title: Numerical solution of Eikonal equation
2003-2007	<b>Received B.Sc. in Applied Mathematics</b> Shahid Chamran University (SCU), Ahvaz.
1999-2003	<b>Received Diploma in Mathematics</b> Palayeshgah High School, Abadan, Iran.

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## RESEARCH INTEREST

- Numerical Analysis
- Numerical Solution of Partial Differential Equations
- Numerical Solution of Fractional Partial Differential Equations
- Numerical Solution of Integro-Differential Equations
- Numerical Simulation
- Meshless Methods
- Finite Element Methods
- Computer Programming
- Topics Related to Interaction Between Numerical Analysis and Other Mathematical Fields

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## HONOR AND AWARDS

- The best Ph.D. thesis at AUT, 2013.
- Granted distinguished talent in Ph.D., M.Sc., and B.Sc.
- Ranked 17<sup>th</sup> in the 2006 nationwide university entrance exam for mathematics graduate studies, Iran.
- Ranked 1<sup>st</sup> among graduated M.Sc. students in applied mathematics at AUT, 2009.
- Ranked 2<sup>nd</sup> among B.Sc. students in applied mathematics at SCU, 2007.

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## PUBLICATIONS

- M. Dehghan, R. Salehi, The use of variational iteration method and Adomian decomposition method to solve the Eikonal equation and its application in the reconstruction problem, Communications in Numerical Methods in Engineering (2009) (ISI).
- M. Dehghan, R. Salehi, A seminumeric approach for solution of the Eikonal partial differential equation and its applications, Numerical Methods for Partial Differential Equations (2009)(ISI).
- M. Dehghan, R. Salehi, The Chebyshev spectral viscosity method for the time dependent Eikonal equation, Mathematical and Computer Modelling (2010)(ISI).
- M. Dehghan, R. Salehi, Solution of a nonlinear time-delay model in biology via semi-analytical approaches, Computer Physics Communication (2010)(ISI).

- M. Dehghan, R. Salehi, A boundary-only meshless method for numerical solution of the Eikonal equation, Computational Mechanics (2011) (ISI).
- M. Dehghan, R. Salehi, The use of homotopy analysis method to solve the time-dependent nonlinear Eikonal partial differential equation, Zeitschrift für Naturforschung A (2011)(ISI).
- M. Dehghan, R. Salehi, The solitary wave solution of the two-dimensional regularized long-wave equation in fluids and plasmas, Computer Physics Communication (2011)(ISI).
- M. Dehghan, R. Salehi, The numerical solution of the non-linear integro-differential equations based on the meshless method, Journal of Computational and Applied Mathematics (2011)(ISI).
- M. Dehghan, R. Salehi, A meshless based numerical technique for traveling solitary wave solution of Boussinesq equation, Applied Mathematical Modelling (2012)(ISI).
- R. Salehi, M. Dehghan, The use of a Legendre pseudospectral viscosity technique to solve a class of nonlinear dynamic Hamilton–Jacobi equations, Computers and Mathematics with Applications (2012)(ISI).
- M. Dehghan, R. Salehi, A method based on meshless approach for the numerical solution of the two-space dimensional hyperbolic telegraph equation, Mathematical Methods in the Applied Sciences Journal (2012)(ISI).
- R. Salehi, M. Dehghan, A generalized moving least square reproducing kernel method, Journal of Computational and Applied Mathematics (2013)(ISI).
- R. Salehi, M. Dehghan, A moving least square reproducing polynomial meshless method, Applied Numerical Mathematics (2013)(ISI).
- M. Dehghan, R. Salehi, A meshfree weak-strong (MWS) form method for the unsteady magnetohydrodynamic (MHD) flow in pipe with arbitrary wall conductivity, Computational Mechanics (2013)(ISI).
- M. Dehghan, R. Salehi, A meshless local Petrov–Galerkin method for the time-dependent Maxwell equations, Journal of Computational and Applied Mathematics (2014)(ISI).
- R. Salehi, A meshless point collocation method for 2-D multi-term time fractional diffusion-wave equation, Numerical Algorithms (2016) (ISI).

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## TEACHING EXPERIENCE

- Teaching, Numerical Solution of Integral Equations, Finite Element Method and Advanced Engineering Mathematics in Tarbiat Modares University, Tehran, Iran.
- Teaching, Calculus I and II, Numerical Computation, Approximate methods for Engineers and Basis Finite Element Method in University of Tehran, Tehran, Iran.
- Teaching, Numerical Analysis 1 and Calculus I in AUT, Tehran, Iran.

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## COMPUTER SKILLS

- Programming skills with Pascal, C++, and Python.
- Proficient programming skills in Maple, Matlab, FreeFEM++, Latex and Microsoft Office.

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## MEMBERSHIP

- National Elites Foundation.
- Organization for Students of Exceptional Talents in AUT, SCU.
- Iranian Mathematics Society.