



## Dr. Behzad Ghanbari

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Kermanshah, Iran

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### *Personal Information:*

**Date of Birth:** August 26, 1984

**Place of Birth:** Kermanshah, Iran

### *University Education:*

**Ph. D:** Applied Mathematics (Numerical Analysis), University of Guilan, (2008-2012)

**M. Sc:** Applied Mathematics (Numerical Analysis), University of Guilan, (2006-2008)

**B. Sc:** Pure Mathematics, University of Kurdistan, (2002- 2006)

Research fellowship at **CMITGroup, University of Liverpool, United Kingdom** (Sep. 2011-  
Apr.2012)

### *Interest Area of Research:*

Numerical Analysis

Exact Solutions of Nonlinear PDEs

Numeric and Analytic Methods

Computational Mathematics

Numerical Linear Algebra

PDE-Based Image Processing

### *Honors:*

Distinguished Young Researcher for Year 2010 in Gilan province.

Ranked **First** among all participants of Applied Mathematics in PhD exam in 2008.

*Publications:*

| No. | Title   | Year |
|-----|---|------|
| 51  | <i>M. S. Osman, Behzad Ghanbari, J. A. T. Machado, New complex waves in nonlinear optics based on the complex Ginzburg-Landau equation with Kerr law nonlinearity, The European Physical Journal Plus</i>   | 2019 |
| 50  | <i>B Ghanbari, F Gomez, Optical soliton solutions of the Ginzburg-Landau equation with conformable conformable derivative and Kerr law nonlinearity, Revista Mexicana de Física 65 (1), 73-81</i>   | 2019 |
| 49  | <i>B Ghanbari, D Baleanu, MA Qurashi, New Exact Solutions of the Generalized Benjamin–Bona–Mahony Equation, Symmetry 11 (1), 1-12</i>   | 2018 |
| 48  | <i>MS Osman, B Ghanbari, New optical solitary wave solutions of Fokas-Lenells equation in presence of perturbation terms by a novel approach, Optik 175, 328-333</i>  | 2018 |
| 47  | <i>B Ghanbari, JF Gómez-Aguilar, Modeling the dynamics of nutrient–phytoplankton–zooplankton system with variable-order fractional derivatives, Chaos, Solitons &amp; Fractals 116, 114-120</i>   | 2018 |
| 46  | <i>Behzad Ghanbari, Abdullahi Yusuf, M. Inc, Dark optical solitons and modulation instability analysis of nonlinear Schrodinger equation with higher order dispersion and cubic-quintic nonlinearity, Journal of Coupled Systems and Multiscale Dynamics 6 (3), 217-227</i> | 2018 |
| 45  | <i>B Ghanbari, M. Inc, A new generalized exponential rational function method to find exact special solutions for the resonance nonlinear Schrödinger equation, The European Physical Journal Plus 133 (4), 142</i>   | 2018 |
| 44  | <i>F Parvaneh, B Ghanbari, A Third Order Method for Solving Nonlinear Equations, Chiag Mai journal of science 44 (3), 1154-1162</i>   | 2017 |
| 43  | <i>B Ghanbari, An Analytical Study for (2+1), The Scientific World Journal 2014</i>   | 2014 |
| 42  | <i>B Ghanbari, On the Convergence of the Homotopy Analysis Method for Solving Fredholm Integral Equations, Walailak Journal of Science and Technology (WJST) 10 (4), 395-403.</i>   | 2014 |
| 41  | <i>B Ghanbari, The convergence study of the homotopy analysis method for solving nonlinear Volterra-Fredholm integrodifferential equations, The Scientific World Journal 2014</i>   | 2014 |
| 40  | <i>MH Matin, B Ghanbari, Effects of Brownian motion and thermophoresis on the mixed convection of nanofluid in a porous channel including flow reversal, Transport in porous media 101 (1), 115-136</i>   | 2014 |

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| 39 | <i>L Rada, K Chen, A Restarted Iterative Homotopy Analysis Method for Two Nonlinear Models from Image Processing, International Journal of Computer Mathematics, 1-31</i>                                 | 2013 |
| 38 | <i>L Rada, K Chen, B Ghanbari, A restarted iterative homotopy analysis method for three-dimensional image segmentation, Image Processing Theory, Tools and Applications (IPTA)</i>                        | 2012 |
| 37 | <i>B Ghanbari, A New Family of Nonlinear Fifth-Order Solvers for Finding Simple Roots Applied Mathematics 3 (6), 577-580</i>  | 2012 |
| 36 | <i>J Biazar, B Ghanbari, HAM solution of some initial value problems arising in heat radiation equations, Journal of King Saud University-Science 24 (2), 161-165</i>                                     | 2012 |
| 35 | <i>B. Ghanbari, Three-Step Iterative Methods with Sixth-Order Convergence for Solving Nonlinear Equations, Walailak Journal of Science and Technology (WJST) 9 (3), 249-253</i>                           | 2012 |
| 34 | <i>B. Ghanbari, A New Analytical Technique to Solve Some Equations Involving Trigonometric Nonlinearities, Walailak Journal of Science and Technology (WJST) 9 (2), 147-152</i>                           | 2012 |
| 33 | <i>B. Ghanbari, A General Family of Fifth-Order Methods for Finding Simple Roots of Nonlinear Equations, Walailak Journal of Science and Technology (WJST) 9 (2), 141-145</i>                             | 2012 |
| 32 | <i>J Biazar, B Ghanbari, The homotopy perturbation method for solving neutral functional–differential equations with proportional delays, Journal of King Saud University-Science 24 (1), 33-37</i>       | 2012 |
| 31 | <i>B. Ghanbari, Some new families of fifth-order methods for finding simple zeros of non-linear equations, Journal of Mathematical and Computational Science 1 (1)</i>                                    | 2012 |
| 30 | <i>J Biazar, B Ghanbari, Some Higher-Order Families of Methods for Finding Simple Roots of Nonlinear Equations, Gen 7 (1), 25-32</i>  | 2011 |
| 29 | <i>MG Porshokouhi, B Ghanbari, Application of He’s variational iteration method for solution of the family of Kuramoto–Sivashinsky equations, Journal of King Saud University-Science 23 (4), 407-411</i> | 2011 |
| 27 | <i>B. Ghanbari, A new general fourth-order family of methods for finding simple roots of nonlinear equations, Journal of King Saud University-Science 23 (4), 395-398</i>                                 | 2011 |
| 27 | <i>J. Biazar, B. Ghanbari, A New Analytical Approach for Solving Nonlinear Boundary Value Problems in Finite Domains, Applied Mathematics 2 (8), 987-992</i>  | 2011 |
| 26 | <i>J Biazar, B Ghanbari, Notes on An improvement to homotopy perturbation method for solving system of linear equations, Computers &amp; Mathematics with Applications 61 (6), 1704</i>                   | 2011 |
| 25 | <i>B Rahimi, B Ghanbari, MG Porshokouhi, Some Third-Order Modifications of Newton’s Method</i>  | 2011 |

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|    | <i>Gen 3 (1), 116-123</i>   |      |
| 24 | <i>J Biazar, B Ghanbari, MG Porshokouhi, MG Porshokouhi, He's homotopy perturbation method: A strongly promising method for solving non-linear systems of the mixed Volterra–Fredholm integral equations, Computers &amp; Mathematics with Applications 61 (4), 1016-1023</i> | 2011 |
| 23 | <i>J Biazar, M Gholami Porshokouhi, B Ghanbari, M Gholami Porshokouhi, Numerical solution of functional integral equations by the variational iteration method Journal of computational and applied mathematics 235 (8), 2581-2585</i>  | 2011 |
| 22 | <i>B Ghanbari, B Rahimi, MG Porshokouhi, A Three-Parameter Third-Order Family of Methods for Solving Nonlinear Equations, Gen 2 (2), 1-6</i>  | 2011 |
| 20 | <i>MG Porshokouhi, B Ghanbari, M Rashidi, Variational Iteration Method for Solving Volterra and Fredholm Integral Equations of the Second Kind, Gen 2 (1), 143-148</i>  | 2011 |
| 19 | <i>B Ghanbari, MG Porshokouhi, An Analytic Approach for Some Equations Arising in Heat Transfer in a Quiescent Medium with Exponential Nonlinearities, Gen 2 (1), 221-231</i>   | 2011 |
| 18 | <i>MG Porshokouhi, B Ghanbari, B Rahimi, Numerical Solution for Non-Linear Fredholm Integral Equations by Newton–Kantorovich Method and Comparison with HPM and ADM, Int. J. Pure Appl. Sci. Technol 3 (1), 44-49</i>   | 2011 |
| 17 | <i>MG Porshokouhi, B Ghanbari, B Rahimi, A New Third-order Family of Methods for Simple Roots of Nonlinear Equations, Int. J. Pure Appl. Sci. Technol 3 (2), 121-127</i>  | 2011 |
| 16 | <i>B Ghanbari, MG Porshokouhi, B Rahimi, A New Class of Third-Order Methods for Multiple Zeros, Int. J. Pure Appl. Sci. Technol 3 (2), 65-71</i>  | 2011 |
| 15 | <i>B Ghanbari, MD Porshokouhi, B Rahimi, A Numerical Method for Solving Systems of Nonlinear ODE's, Int. J. Pure Appl. Sci. Technol 3 (1), 27-34</i>  | 2011 |
| 14 | <i>MG Porshokouhi, B Ghanbari, M Gholami, M Rashidi, Numerical Solution of Eighth Order Boundary Value Problems with Variational Iteration Method, Gen 2 (1), 128-133</i>   | 2011 |
| 12 | <i>G Porshokouhi, B Ghanbari, M Gholami, M Rashidi, Approximate Solution of Convection-Diffusion Equation by the Homotopy Perturbation Method, Gen 1 (2), 105-111</i>   | 2010 |
| 11 | <i>MG Porshokouhi, B Ghanbari, M Gholami, M Rashidi, Application of the Variational Iteration Method for Solving Differential-Difference Equations, Gen 1 (2), 133-137</i>  | 2010 |
| 10 | <i>MG Porshokouhi, B Ghanbari, M Gholami, He's Variational Iteration Method for Solving Differential Equations of the Fifth Order, Gen 1 (2), 148-153</i>   | 2010 |
| 9  | <i>B Ghanbari, MG Porshokouhi, A New Method for Solving Nonlinear BVPs, Gen 1 (2), 138-147</i>  | 2010 |

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| 8 | <i>B. Ghanbari, Erratum to "Approximate explicit solutions of nonlinear BBMB equations by homotopy analysis method and comparison with the exact solution"[Phys. Lett. A 368 (2007) 64] Physics Letters A 374, 3099-3100</i>                      | 2010 |
| 7 | <i>J Biazar, B Ghanbari, A new third-order family of nonlinear solvers for multiple roots, Computers &amp; Mathematics with Applications 59 (10), 3315-3319</i>   | 2010 |
| 6 | <i>J Biazar, M Gholami Porshokuhi, B Ghanbari, Extracting a general iterative method from an Adomian decomposition method and comparing it to the variational iteration method, Computers &amp; mathematics with applications 59 (2), 622-628</i> | 2010 |
| 5 | <i>J Biazar, B Ghanbari, A general fourth-order family of methods for solving nonlinear equations Proceedings of the 11th WSEAS international conference on Mathematical and ...</i>  | 2009 |
| 4 | <i>J Biazar, B Ghanbary, A modification on Newton's method for solving systems of non-linear equations, World Academy of Science, Engineering and Technology 58, 897-901</i>  | 2009 |
| 3 | <i>J Biazar, B Ghanbary, A New Technique for Solving Systems of Nonlinear Equations, Applied Mathematical Sciences 2 (55), 2699-2703</i>  | 2008 |
| 2 | <i>J Biazar, B Ghanbary, A New Approach for Solving Systems of Nonlinear Equations, International Mathematical Forum 3 (38), 1885-1889</i>  | 2008 |
| 1 | <i>J Biazar, B Ghanbary, A New Computational Approach for Nonlinear Equations, International Mathematical Forum 3 (20), 955-960</i>   | 2008 |