

Curriculum Vitae  
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August 6, 2012

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## PERSONAL DATA

Born March 17, 1967 in Tehran, Iran.  
Postal Address P.O. Box. 34149 – 5555, Ghazvin, Iran.

## EDUCATION

Ph.D. Feb. 5, 1996, University for Teacher Education, Tehran, Iran.  
Major Field : Numerical Solution of Integral Equations.  
Second Field : Numerical Solution of Differential Equations.  
Third Field : Linear Programming.  
Thesis : Numerical Galerkin Methods for Integral Equations of the First Kind.  
Advisor : Prof. Esmail Babolian.

M.Sc. In Applied Mathematics, Numerical Analysis.  
September 1991, University for Teacher Education, Iran.  
Dissertation : Numerical Solution of Integral Equations of the First Kind.  
Advisor : Prof. Esmail Babolian.

B.Sc. In Applied Mathematics.  
September 1989, Tehran University, Tehran, Iran.  
Project : L3 Algorithm.  
Advisor : Prof. G. B. Khosroshahi.

July – August, 1995 Visiting as a Ph.D. Student,  
Department of Mathematics,  
Wuhan University,  
People's Republic of China.

UNESCO Training 22 Oct. 2001 to 2 Nov. 2001,  
2001 KUT – UNESCO Annual Training Program in  
Technology Education : Multimedia Application.  
Certificate No. 20012208014.  
KOREA University of Technology and Education.

## 1 WORK EXPERIENCE

1996-currently: Department of Mathematics, Imam Khomeini International University, Ghazvin 34149-16818 Iran.

2000-currently: Department of Mathematics, Science and Research Branch, Islamic Azad University, Tehran, 14778, Iran.

May 1996: Lecturer, Imam Khomeini International University, Ghazvin, Iran.

July 2000: Assistant professor, Imam Khomeini International University, Ghazvin, Iran.

July 2002: Associate professor, Imam Khomeini International University, Ghazvin, Iran.

June 2006 - July 2006 : Visiting Scientist, School of Naval Architecture and Ocean Engineering, Shanghai Jiao Tong University, China.

Mar. 2007: Full professor, Imam Khomeini International University, Ghazvin, Iran.

Mar. 2008: Visiting Scientist, Quaid-i-Azam University of Islamabad on HEC Visiting Scholar Program for one month, Pakistan.

June 2008 - Sep. 2008: Visiting Scientist, Quaid-i-Azam University of Islamabad on HEC Visiting Scholar Program, Pakistan.

Feb. 2009: Visiting Scientist, National University of Malaysia (UKM), Research Fund UKM-GUP-BTT-07-25-173, Malaysia.

## 2 FIELDS OF INTEREST

Numerical Solution of Integral Equations, Singular Integral Equations with Hilbert or Cauchy Kernels, Hammerstein Integral Equations, Numerical Solution of Differential Equations, Wavelet Basis, Data Envelopment Analysis, Numerical Solution of Partial Differential Equations, Fuzzy Numerical Analysis. Variational Method. Homotopy Method. Adomian Decomposition Method.

## 3 RESEARCH PAPERS

1- M.R. Darafsheh and M. Rajabi Tarkhorani and S. Abbasbandy. The  $t$ -Designs on 13 Points with a Primitive Group of Order 78 as a Group of Automorphism. *J. Inst. Maths. & Comp. Sc. (Math. Ser.)* Vol. 5, No. 2, 1991, 171-180. **MR** 1207051, **Zbl.** 0801.05011.

2- S. Abbasbandy and E. Babolian. Automatic Augmented Galerkin Algorithms for

Fredholm Integral Equations of the First Kind. *ACTA Math. Sci. (English Ed.)* Vol. 17, No. 1, 1997, 69-84, **MR** 98d:65165, **Zbl.** 0890.65137.

3- S. Abbasbandy and E. Babolian. Interpolation of Fuzzy Data by Natural Splines. *J. Appl. Math. Comput.* Vol. 5, No. 2, 1998, 457-463, **MR** 1 625 194, **Zbl.** 0914.65001.

4- S. Abbasbandy and E. Babolian. An Automatic Augmented Galerkin Method For Singular Integral Equations With Hilbert Kernel. *J. Appl. Math. Comput.* Vol. 8, No. 2, 2001, 337-345, **MR** 2002b:65193, **Zbl.** 0984.65144.

5- S. Abbasbandy. Interpolation of Fuzzy Data by Complete Splines. *J. Appl. Math. Comput.* Vol. 8, No. 3, 2001, 587-594, **MR** 2002e:65019, **Zbl.** pre01686031.

6- S. Abbasbandy and Du Jinyuan. Numerical Implementations of Cauchy-type Integral Equations. *J. Appl. Math. Comput.* Vol. 9, No. 1, 2002, 253-260, **MR** 2002j:65131, **Zbl.** 0995.65144.

7- S. Abbasbandy and B. Asady. Note on "A new approach for defuzzification". *Fuzzy Sets and Systems*, Vol. 128, No. 1, 2002, 131-132, **MR** 1 903 238, **Zbl.** pre01809951.

8- S. Abbasbandy and M.A. Fariborzi Araghi. A Reliable Method to Determine the Ill-condition Functions Using Stochastic Arithmetic. *Southwest J. of Pure and Applied Mathematics*, No. 1, July 2002, 33-38, **MR** 1 911 140, **Zbl.** pre01925195.

9- S. Abbasbandy and M.A. Fariborzi Araghi. Numerical Solution of Improper Integrals with Valid Implementation. *Mathematical & Computational Applications*, Vol. 7, No. 1, 2002, 83-91, **MR** 1 916 609, **Zbl.** 1012.65022.

10- S. Abbasbandy and T. Allah Viranloo. Numerical Solutions of Fuzzy Differential Equation by Runge-Kutta Method and the Intuitionistic Treatment. *Notes on Intuitionistic Fuzzy Sets*, Vol. 8, No. 3, 2002, 43-53, **MR** 2026512.

11- S. Abbasbandy and T. Allah Viranloo. Numerical Solutions of Fuzzy Differential Equations by Taylor Method. *J. of Computational Methods in Applied Mathematics*, Vol. 2, No. 2, 2002, 113-124, **MR** 1 930 841.

12- S. Abbasbandy and T. Allah Viranloo. Numerical Solution of Fuzzy Differential Equation. *Mathematical & Computational Applications*, Vol. 7, No. 1, 2002, 41-52, **MR** 1 916 608, **Zbl.** 1013.65070.

13- S. Abbasbandy and M.A. Fariborzi Araghi. The Valid Implementation of Numerical Integration Methods. *Far East J. of Appl. Math.* Vol. 8, No. 2, 2002, 89-101, **MR** 1 942 695, **Zbl.** pre01894902.

14- S. Abbasbandy. Improving Newton-Raphson method for nonlinear equations by modified Adomian decomposition method. *Applied Mathematics and Computation*, Vol. 145, No. 2-3, 2003, 887-893, **MR** 2 009 307.

15- S. Abbasbandy and T. Allah Viranloo. Extrapolation Method for Improving the

solution of Fuzzy Initial Value Problems. *Mathematical & Computational Applications*, Vol. 9, No. 2, 2004, 205-214, **MR** 1 999 813.

16- S. Abbasbandy and M.A. Fariborzi Araghi. The use of the stochastic arithmetic to estimate the value of interpolation polynomial with optimal degree. *Applied Numerical Mathematics*, Vol. 50, 2004, 279-290, **MR**2074006.

17- S. Abbasbandy and T. Allah Viranloo. Numerical Solutions of Fuzzy Differential Equation by Runge-Kutta Method. *Nonlinear Studies*, Vol. 11, No. 1, 2004, 117-129, **MR**2058064.

18- K. Maleknejad, F. Mirzaee and S. Abbasbandy. Solving linear integro-differential equations system by using rationalized Haar functions method. *Applied Mathematics and Computation*, Vol. 155, 2004, 317-328.

19- S. Abbasbandy and B. Asady. The nearest trapezoidal fuzzy number to a fuzzy quantity. *Applied Mathematics and Computation*, Vol. 156, 2004, 381-386.

20- S. Abbasbandy and B. Asady. Newton's Method for Solving Fuzzy Nonlinear Equations. *Applied Mathematics and Computation*, Vol. 159, 2004, 349-356.

21- S. Abbasbandy, T. Allah Viranloo, Óscar López-Pouso and Juan J. Nieto. Numerical Methods for Fuzzy Differential Inclusions, *Comput. Math. Appl.*, Vol. 48, 2004, 1633-1641.

22- E. Babolian, H. Sadeghi Goghary and S. Abbasbandy. Numerical solution of linear Fredholm fuzzy integral equations of the second kind by Adomian method. *Applied Mathematics and Computation*, Vol. 161, 2005, 733-744, **Zbl.** 1062.65143.

23- S. Abbasbandy and M.T. Darvishi. A numerical solution of Burgers' equation by modified Adomian method. *Applied Mathematics and Computation*, Vol. 163, 2005, 1265-1272, **Zbl.** 1060.65649.

24- S. Abbasbandy and M.T. Darvishi. A numerical solution of Burgers' equation by time discretization of Adomian's decomposition method. *Applied Mathematics and Computation*, Vol. 170, 2005, 95-102.

25- B. Asady, S. Abbasbandy and M. Alavi. Fuzzy General Linear Systems. *Applied Mathematics and Computation*, Vol. 169, 2005, 34-40.

26- S. Abbasbandy. Extended Newton's method for a system of nonlinear equations by modified Adomian decomposition method. *Applied Mathematics and Computation*, Vol. 170, 2005, 648-656.

27- S. Abbasbandy and M.A. Fariborzi Araghi. A Stochastic Scheme For Solving Definite Integrals. *Applied Numerical Mathematics*, Vol. 55, 2005, 125-136.

28- S. Abbasbandy, A. Jafarian and R. Ezzati. Conjugate Gradient Method for Fuzzy Symmetric Positive Definite System of Linear Equations. *Applied Mathematics and Com-*

putation, Vol. 171, 2005, 1184-1191.

29- S. Abbasbandy. Modified homotopy perturbation method for nonlinear equations and comparison with Adomian decomposition method. *Applied Mathematics and Computation*, Vol. 172, 2006, 431-438.

30- S. Abbasbandy. Homotopy perturbation method for quadratic Riccati differential equation and comparison with Adomian's decomposition method. *Applied Mathematics and Computation*, Vol. 172, 2006, 485-490.

31- S. Abbasbandy, R. Ezzati and A. Jafarian. LU Decomposition Method for Solving Fuzzy System of Linear Equations. *Applied Mathematics and Computation*, Vol. 172, 2006, 633-643.

32- S. Abbasbandy and M. Amirfakhrian. The nearest approximation of a Fuzzy quantity in parametric form. *Applied Mathematics and Computation*, Vol. 172, 2006, 624-632.

33- S. Abbasbandy and B. Asady. Ranking of fuzzy numbers by sign distance. *Information Sciences*, Vol. 176, 2006, 2405-2416.

34- S. Abbasbandy, Juan J. Nieto and M. Alavi. Tuning of reachable set in one dimensional fuzzy differential inclusions. *Chaos, Solitons & Fractals*, Vol. 26, 2005, 1337-1341.

35- S. Abbasbandy. A new decomposition method based on infinite products. *Kybernetes*, Vol. 34, 2005, 1027-1033.

36- S. Abbasbandy. Numerical solutions of the integral equations: Homotopy perturbation method and Adomian's decomposition method. *Applied Mathematics and Computation*, Vol. 173, 2006, 493-500.

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38- S. Abbasbandy and A. Jafarian. Steepest Descent Method for Solving Fuzzy Nonlinear Equations. *Applied Mathematics and Computation*, Vol. 174, 2006, 669-675.

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- 52- M. Soleimani-damaneh, G.R. Jahanshahloo and S. Abbasbandy. Computational and theoretical pitfalls in some current performance measurement techniques; and a new approach, *Applied Mathematics and Computation*, Vol. 181, 2006, 1199-1207.
- 53- S. Abbasbandy and M. Amirfakhrian. The nearest trapezoidal form of a generalized left right fuzzy number. *Internat. J. Approx. Reason.* 43 (2006) 166-178.
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- 59- S. Abbasbandy. An approximation solution of a nonlinear equation with Riemann-Liouville's fractional derivatives by He's variational iteration method. *J. Comput. Appl. Math.* 207 (2007) 53-58.
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- 75- R. Ezzati and S. Abbasbandy, Existence of extremal solutions for fuzzy polynomials and their numerical solutions, *Mathware Soft Comput.* Vol. 14, No. 2, 2007, 147-164.
- 76- S. Abbasbandy. Solitary wave solutions to the modified form of Camassa-Holm equation by means of the homotopy analysis method, *Chaos, Solitons & Fractals.* 39 (2009) 428-435.
- 77- S. Abbasbandy. Solitary wave solutions to the Kuramoto–Sivashinsky equation by means of the homotopy analysis method. *Nonlinear Dynam.* 52 (2008) 35-40.
- 78- S. Abbasbandy. Approximate solution for the nonlinear model of diffusion and reaction in porous catalysts by means of the homotopy analysis method. *Chem. Eng. J.* 136 (2008) 144-150.
- 79- E. Babolian, S. Abbasbandy and F. Fattahzadeh. A numerical method for solving a class of functional and two dimensional integral equations. *Appl. Math. Comput.* 198 (2008) 35-43.
- 80- S. Abbasbandy. Soliton solutions for the Fitzhugh-Nagumo equation with the homotopy analysis method. *Appl. Math. Model.* 32 (2008) 2706-2714.
- 81- S. Abbasbandy and E.J. Parkes. Solitary smooth hump solutions of the Camassa–Holm equation by means of the homotopy analysis method. *Chaos, Solitons & Fractals* 36 (2008) 581-591.
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- 83- S. Abbasbandy, M. Otadi and M. Mosleh. Numerical solution of a system of fuzzy polynomials by fuzzy neural network. *Inform. Sci.* 178 (2008) 1948–1960.
- 84- S. Abbasbandy. Numerical method for non-linear wave and diffusion equations by the variational iteration method. *Internat. J. Numer. Methods Engrg.* 73 (2008) 1836-1843.
- 85- S. Abbasbandy and A. Shirzadi. The variational iteration method for a family of fifth-order boundary value differential equations. *Int. J. Non. Dyn. Eng. Sci.* 1 (2009) 39-46.
- 86- S. Abbasbandy and E. Shivanian. Application of the Variational Iteration Method for Nonlinear Volterra’s Integro-Differential Equations. *Zeitschrift für Naturforschung A* 63(a) (2008) 538-542.
- 87- S. Abbasbandy, M. Yürüsoy and M. Pakdemirli, The analysis approach of boundary layer equations of power-law fluids of second grade. *Zeitschrift für Naturforschung A*

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- 105- S. Abbasbandy and E. Taati. Numerical solution of the system of nonlinear Volterra integro-differential equations with nonlinear differential part by the operational Tau method and error estimation. *J. Comput. Appl. Math.* 231 (2009) 106-113.
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32- S. Abbasbandy. *Numerical results of flow in a third grade fluid between two porous walls*. Fourth International Conference on Mathematical Models and Methods in Fluid Mechanics, COMSATS, Islamabad, Pakistan, July 2008.

33- S. Abbasbandy. *On the unsteady nonlinear convective-radiative equation*. Second International Conference on "Recent Developments in Fluid Mechanics", Islamabad, Pakistan, August 2008.

34- S. Abbasbandy. *Some recent applications of the homotopy analysis method*. The 18<sup>th</sup> Seminar on Mathematical Analysis and its Applications, 15-16 April (26-27 Farvardin 1388) 2009, pp 1-7, Tarbiat Moallem University, Iran.

35- S. Abbasbandy. *Ranking of fuzzy numbers, some recent and new formulas*. International Fuzzy Systems Association World Congress (IFSA-2009) / European Society for Fuzzy Logic and Technology Conference (EUSFLAT-2009), pp. 642-646, July 2009, Lisbon, Portugal.

36- S. Abbasbandy. *The homotopy analysis method for multiple solutions of nonlinear boundary value problems*. Third International Conference on "Recent Developments in Fluid Mechanics", Islamabad, Pakistan, July 2009.

37- S. Abbasbandy and S. Hajjigahsemi. *A fuzzy distance between two fuzzy numbers*. 13<sup>th</sup> International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems (IPMU-2010), pp. 376-382, June-July 2010, Dortmund, Germany. (Printed in *Communications in Computer and Information Science, 2010, Volume 81, Part 5, 376-382*.)

38- S. Salahshour, S. Abbasbandy, T. Allahviranloo. *Ranking fuzzy numbers using fuzzy maximizing-minimizing points*. The 7th conference of the European Society for Fuzzy Logic and Technology Conference (EUSFLAT-2011) / and "les rencontres franco-phones sur la Logique Floue et ses Applications" (LFA-2011), pp. 763-769, July 2011, Aix-Les-Bains, France.

39- T. Allahviranloo, S. Abbasbandy, S. Salahshour. *Fuzzy fractional differential equations with Nagumo and Krasnoselskii-Krein condition*. The 7th conference of the European Society for Fuzzy Logic and Technology Conference (EUSFLAT-2011) / and "les rencontres francophones sur la Logique Floue et ses Applications" (LFA-2011), pp. 1038-1044, July 2011, Aix-Les-Bains, France.



## 7 WORKING REPORTS

1- S. Abbasbandy and M.A. Fariborzi Araghi. *The Usage of CESTAC Method in Valid Implementation of some Numerical Algorithms.*

2- S. Abbasbandy and M.A. Fariborzi Araghi. *The Valid Implementation of Numerical Integration Methods Using Stochastic Arithmetic.*

3- S. Abbasbandy and T. Allah Viranloo. *Numerical Solution of Fuzzy Differential Equation by Runge-Kutta Method.*

4- S. Abbasbandy and T. Allah Viranloo. *Numerical Methods for fuzzy Differential Inclusions.*

## 8 REVIEWER

Acta Applicanda Mathematicae, Acta Mechanica, Advances in Fuzzy Mathematics, Ain Shams Engineering Journal, Applications and Applied Mathematics, Applied Mathematics and Computation, Applied Mathematics Letters, Applied Mathematical Modelling, Applied Numerical Mathematics, Arabian Journal for Science and Engineering, Boundary Value Problems, Bulletin of the Belgian Mathematical Society, Bulletin Of The Malaysian Mathematical Sciences Society, Canadian Journal of Applied Sciences, Carpathian J. of Mathematics, Central European J. of Physics, Chemical Engineering Communications, Chemical engineering science, Chinese Physics Letters, Circuits Systems & Signal Processing, Communications in Nonlinear Science and Numerical Simulations, Communications in Numerical Methods in Engineering, Computers & Mathematics with Applications, Computer Physics Communications, Control and Cybernetics, Differential Equation and Nonlinear Mechanics, Discrete Dynamics in Nature and Society, Energy Conversion and Management, Engineering Computations, European J. of Mechanics - A/Solids, Fuzzy Information and Engineering, Fuzzy Sets and Systems, Fuzzy System Engineering, Information Fusion, Information Sciences, Int. J. for Numerical Methods in Engineering, Int. J. for Numerical Methods in Fluids, Int. J. of Approximate Reasoning, Int. J. of Artificial Intelligence, Int. J. of Approximate Reasoning, Int. J. of Computational Mathematics and Numerical Simulation, Int. J. of Computational Methods, Int. J. of Computer Mathematics, Int. J. of Microscale and Nanoscale Thermal and Fluid Transport Phenomena, Int. J. of General Systems, Int. J. of Heat and Mass Transfer, Int. J. of Mathematics and Statistics, Int. J. of Modern Physics B, Int. J. of Non-Linear Mechanics, Int. J. of Nonlinear Science, Int. J. of Physical Sciences, Int. J. of Systems Science, Int. J. of Thermal Sciences, Int. J. of Uncertainty, Fuzziness and Knowledge-Based Systems, Iranian J.

Of Fuzzy Systems, Italian J. of Pure and Applied Mathematics, J. of advanced research in applied mathematics, J. of Applied Mathematics and Computing, J. of Computational and Applied Mathematics, J. of Engineering Mathematics, J. of Fluids Engineering, J. of Fluid Mechanics, Journal of Heat Transfer ,J. of King Saud University, Journal of Mathematics and Computer Science, J. of Modern Methods in Numerical Mathematics, J. of Nature Science and Sustainable Technology, J. of Science and Technology Education Research, J. of Porous Media, J. of Sound and Vibration, J. of the Franklin Institute, Mathematical And Computational Applications, Mathematical Methods in Applied Sciences, Mathematical Modelling and Analysis, Mathematical Sciences, Mathware & Soft Computing, Meccanica, Microfluidics and Nanofluidics, Modern Physics Letters B, Neural Computing and Applications, Nonlinear Analysis: Hybrid Systems, Nonlinear Analysis: Modelling And Control, Nonlinear Analysis Series B: Real World Applications, Nonlinear Dynamics, Numerical Algorithms, Numerical Heat Transfer, Numerical Methods for Partial Differential Equations, Physics Letters A, Physics of Fluids, Physica Scripta, Progress in Computational Fluid Dynamics, Quaestiones Mathematicae, Quantitative Finance, Romanian J. An. Stiint. Univ. Ovidius Constantza, Scientia Iranica, Punjab University J. of Mathematics, Scientific Research and Essays, Surveys in Mathematics and its Applications, Thai Journal of Mathematics, The Open Numerical Methods J., Turkish Journal of Fuzzy Systems, Zeitschrift für Angewandte Mathematik und Physik (ZAMP), Zeitschrift für Naturforschung A.

## 9 Graduate Student Supervised or Co-Supervised

12 Master Degree Projects Directed.

### PhD Students:

- 1- M.A. Fariborzi Araghi (The Methods of Valid Implementation of the Numerical Algorithms).
- 2- T. AllahViranloo (Numerical Solution of Fuzzy Differential Equations).
- 3- B. Asady (Ranking of fuzzy numbers).
- 4- M. Alavi (Numerical Solution of Fuzzy Differential Equations and Numerical Method For Integration of Fuzzy Integrals).

- 5- A. Jafarian (Iterative Methods For Fuzzy Linear Systems).
- 6- M. Amirfakhrian (Universal Approximation Of Fuzzy Functions).
- 7- R. Ezzati (Numerical Solution Of Fuzzy Systems).
- 8- M. Otadi (Iterative Methods For Fuzzy Linear Systems).
- 9- M. Mosleh (General dual fuzzy linear systems).
- 10- N. Ahmady (Methods for solving first order fuzzy differential equations).
- 11- E. Ahmady (Methods for solving  $N$ th-order fuzzy differential equations).
- 12- T. Hajjari (A New Approach for Ranking of Fuzzy Numbers by Levels).
- 13- H. Rouhparvar (Approximate Analytical Solution of Fuzzy Partial Differential Equations).
- 14- M. Shafiee (Numerical Solution Of Fuzzy Integral Equations).
- 15- S.R. Saneifard (On The Fuzzy Distances and Their Applications In Ranking of Fuzzy Numbers).
- 16- A. Shirzadi (Meshless methods for solving elliptic and parabolic partial differential equations with boundary conditions).
- 17- E. Shivanian (Numerical Methods to Predict Multiplicity of Solutions of Nonlinear Boundary Value Problems).
- 18- S. Moloudzadeh (Numerical solution of fully fuzzy linear system of equations).
- 19- P. Darabi (A numerical solution of  $n$ -order linear fuzzy differential equations with constant coefficients using ordinary or generalized fuzzy derivatives).
- 20- M. Paripour (Homotopy analysis method for solving fuzzy and crisp nonlinear

differential equations).

21- M. Ashtiani Araghi (Homotopy analysis method in solving nonlinear partial differential equations).

22- S. Salahshour (Numerical and analytical solutions of fuzzy differential equations of fractional and natural order).

## 10 PROFESSIONAL AND HONORARY MEMBERSHIPS

The Mathematical Association of America (1986-1991), Mathematical Programming Society (1990-1992), Mathematics Association of Iran. Iranian Society of Cryptology. Iranian Fuzzy Sets and System .

## 11 RESEARCH PROJECTS

1- Flight Simulation, Ministry of Defense, 1988-1990.

2- Designs with Primitive Groups, with Dr. M. R. Darafsheh and Dr. M. Rajabi Tarkhorani, Tehran University, 1989.

3- Designs Data-Base, With Dr. G. B. Khosrovshahi, Tehran University, 1990.

4- Numerical Solution of Integral Equations of the First Kind with Singular Hilbert Kernel, With Dr. E. Babolian, Institute for Studies in Theoretical Physics and Mathematics (IPM), 1996-1997.

5- Multivariate Calibration (Partial Least Squares Regression) Methods for Spectral Analysis, with Dr. M. Chalouisi, Teacher Training University, 1996-1997.

6- Body Fitted-Coordinate and its applications in Simulation of Solidification of Casting Parts, With Dr. E. Babolian, Teacher Training University, 1999-2000.

7- Interpolation of Fuzzy Data, Imam Khomeini International University, 2000.

8- Automatic Methods for Singular Integral Equations with Hilbert Kernel, Imam Khomeini International University, 2001.

9- Numerical Solution of Fuzzy Differential Equation by 2nd Runge-Kutta Method, Imam Khomeini International University, 2001.

10- The usage of Stochastic Arithmetic Valid Implementation of some Numerical Algorithms, Imam Khomeini International University, 2002.

11- Improving Newton-Raphson method for nonlinear equations by modified Adomian decomposition method, Imam Khomeini International University, 2003.

12- Modified homotopy perturbation method for nonlinear equations and comparison with Adomian decomposition method, Imam Khomeini International University, 2005.

13- Homotopy perturbation method for quadratic Riccati differential equation and comparison with Adomian's decomposition method, Imam Khomeini International University, 2005.

14- Homotopy analysis method for heat radiation equations, Imam Khomeini International University, 2007.