Tayebeh Hajjari, PhD

Houston Community College, Northwest Campus tayebeh.hajjari@hccs.edu

Curriculum Vitae

Publications: 24 presentations in International conferences, 19 ISI Papers in International Journals, 9 Papers in national Journals, and 6 published Books.

EDUCATION:

Ph.D. Applied Mathematics- Fuzzy Numerical Analysis, 2009

Science and Research Branch of Azad University, Tehran, Iran

M.Sc. Mathematics Education, 2004

Science and Research Branch of Azad University, Tehran, Iran

B. Sc. Teaching Mathematics, 1989

Al-Zahra University, Tehran, Iran

ACADEMIC WORK EXPERIENCE:

Instructor Mathematics, August 2019-Present

Department of Mathematics, Houston Community College, Northwest Campus

Adjunct Professor, Faculty member, May 2019- August 2019

Department of Mathematics, Lone Star College, University Park

Adjunct Professor, Faculty member, Jan 2019- August 2019

Department of Mathematics, Houston Community College, Southwest Campus

Associate Professor, Faculty member, 2015-2018

Department of Mathematics, Azad University, Iran

Assistant Professor, Faculty member, 2009-2015

Department of Mathematics, Azad University, Iran

Instructor, Faculty Member, 2006-2009

Department of Mathematics, Azad University, Iran

Mathematics Teacher, 1990-2006

Aeen-Tarbiat College, Tehran, Iran

Head of International Relations, 1988-1991

Al-Zahra University, Tehran, Iran

Professional Experience and Skills

- Languages: English, Persian and German
- Reviewer of international Journal & conferences
- Teaching various disciplines at university level
- Research
- Project manager
- Microsoft Office, Access, Project; Photoshop; Computer and Sciences including IT

Lectured Courses

- Pre-Calculus, Calculus I, II, III
- Calculus for Business & Social Sciences
- Mathematics for Business & Social Sciences
- Algebra I, II, Linear Algebra
- Differential Equations
- Probability and Statistics
- Discrete Mathematics
- Numerical Analysis
- Vector Analysis
- Numerical Computations
- Operations Research

Conferences Presentation & Published Proceedings:

- 1. New Centroid Index for Ordering Fuzzy Numbers, International Conference on Mathematics and Mechanics (ICMM) 2014, Vienna, Austria.
- 2. T. Hajjari, An Improved Centroid Index by reviewing on Centroid-Index Methods, 14th IEEE International Symposium on Computational Intelligence and Informatics (CINTI) 2013, Budapest, Hungary.
- 3. M. Alibeigi T. Hajjari and E. Ghasemkhani, An Algorithm to Determine Fuzzy Distance Measure, The 13th Iranian Conference on Fuzzy Systems (ISFS) 2013, Qazvin, Iran.
- 4. T. Hajjari, M. Alibeigi and E. Ghasemkhani, Fuzzy Distance Measure via End Points, 9th International Industrial Engineering Conference, K. N. University of Technology, 2013, Tehran, Iran.
- 5. T. Hajjari, Recurrent Fuzzy Ranking Methods, The Sixth Global Conference on Power Control and Optimization", (PCO) 2012, Las Vegas, USA.
- 6. T. Hajjari, Ranking Index for L-R Fuzzy Numbers, 2nd International Conference on Software Engineering, Management & Application (ICSEMA) 2011, Zurich, Switzerland.
- 7. T. Hajjari, Y. Nejadbakhsh, M. Farahmand, New Novel Maintenance Strategy through Fuzzy Roles, The 11th Iranian Conference on Fuzzy Systems (ISFS) 2011, Zahedan, Iran.
- 8. T. Hajjari, Industrial Equipment Maintenance via Fuzzy Rules, The 7th International Conference on Modelling in Industrial Maintenance and Reliability (MIMAR 2011), Cambridge, UK.
- 9. T. Hajjari, New Approach for Distance Measure of Fuzzy Numbers, International Conference on Operation Research and Optimization, IPM, 2011, Tehran, Iran.
- 10. T. Hajjari, Fuzzy Distance Measure for Generalized Fuzzy Numbers, The 11th International Conference on Intelligent Technologies (In Tech'10) 2010, Bangkok, Thailand.
- 11. T. Hajjari, Measuring Distance of Fuzzy Numbers by Trapezoidal Fuzzy Numbers, International Conference on Mathematical Sciences (ICMS) 2010, Blou, Turkey.

- 12. T. Hajjari, Ranking Fuzzy Numbers by Ambiguity Degrees, First International Conference on Mathematics and Statistics, (ICMAE) 2010, Kuala Lumpur, Malaysia.
- 13. T. Hajjari, Ranking Fuzzy Number by Magnitude Degree Operator, The 10th Iranian Conference on Fuzzy Systems, (ISFS) 2010, Tehran, Iran.
- 14. T. Hajjari, Ranking of Fuzzy Numbers by Middle of Expected Interval, First International Conference on Mathematics and Statistics, (AUS-ICMS) 2010, Sharjah.
- 15. T. Hajjari, Trapezoidal Approximation Based on Middle of Maxim and Middle of Support, International Conference of Mathematical Sciences (ICMS) 2009, Istanbul, Turkey.
- 16. T. Hajjari, The Nearest Symmetric Trapezoidal Approximation of an Arbitrary Fuzzy Number, The 9th Iranian Conference on Fuzzy Systems, (ISFS) 2009 Yazd, Iran.
- 17. Fuzzy Euclidean Distance for Fuzzy Data, The 8th Iranian Conference on Fuzzy Systems, (ISFS) 2008 Tehran, Iran.
- 18. B. Savizi, T. Hajjari and A. Shahvarani, Situated Decision Making in Mathematics Education, The fifth International Mathematics Education and Society Conference, 2008, Portugal.
- 19. T. Hajjari, Comparison Fuzzy Numbers by Modified Centroid Point Method, The 3rd International Conference in Mathematical Sciences (ICM) 2008, Dubai.
- 20. T. Hajjari, A Method to Compute Interval Integral, The 2nd International Symposium on Nonlinear Dynamics, (ISND) 2007, Shanghai, China.
- 21. T. Hajjari and M. Barkhordari, Ranking Fuzzy Numbers by Sign Length, The 7th Iranian Conference on Fuzzy Systems, (ISFS) 2007 Mashhad, Iran.
- 22. M. Barkhordari and T. Hajjari, Novel Ranking Method of Fuzzy Numbers, The 7th Iranian Conference on Fuzzy Systems, (ISFS) 2007 Mashhad, Iran.
- 23. M. Barkhordari and T. Hajjari, Ranking of Fuzzy Numbers by The Angle Measure, the 38th Annual Iranian Mathematics Conference, 2007, Zanjan, Iran.
- 24. T. Hajjari, On the Error Propagation with Triangular Fuzzy Numbers, The 6th Iranian Conference on Fuzzy Systems, (ISFS) 2006, Shiraz, Iran.

Publications:

- 1. A. Ali, W.A Mior Othman, C. Ozel, T. Hajjari, A Geometric Inequality for Warped Product Pseudo-Slant Sub manifolds of Nearly Sasakian Manifolds, Comptes rendus de l'Académie bulgare des sciences: sciences mathématiques et naturelles, Vol. 70, No. 2 (2017), pp. 175-182.
- 2. T. Hajjari, A new improved method for comparing fuzzy numbers by centroid point, Journal of Mathematical Extension, No. 2 (2016), pp. 1-23.
- 3. F. Ghan, S. Islam, C. Ozel, L. Ali, M.M. Rashidi, and T. Hajjari, Application of modified optimal homotopy perturbation method to higher order boundary value problem in a finite domain, Hacettepe Journal of Mathematics and Statistics, Vol. 45, No. 4 (2016), pp. 1049-1060. (ISI Journal)
- 4. T. Hajjari, Fuzzy risk analysis based on ranking of fuzzy numbers via new magnitude method, Iranian Journal of Fuzzy Systems, Vol. 12, No. 2 (2015), pp. 17-29. (ISI Journal)
- 5. M. Alibeigi, T. Hajjari and E. Ghasemkhani, A theoretical development on fuzzy distance measure, Journal of Mathematical Extension Vol. 9, No. 3, (2015), pp.15-38.
- 6. M. Alibeigi, T. Hajjari and E. Ghasemkhani, A new index for fuzzy distance measure, Applied Mathematical and Information Sciences, Vol. 9, No. 6. (2015), pp. 1-9. (ISI Journal)
- 7. T. Hajjari, New centroid index for ordering fuzzy numbers, International Scientific Journal, Vol.1, No.1 (2015)
- 8. M. Alibeigi, E. Ghasemkhani and T. Hajjari, A New strategy for safe diving, American Journal of Life Sciences, Vol. 3, No. 3-1 (2015) pp. 12-17.
- 9. T. Hajjari and H. Mahzoon, Approximation of a fuzzy number by two main Characteristics, Mathematical Inverse Problems, Vol. 1, No. 2 (2014), pp. 101-11.

- M. Bazrafshan and T. Hajjari, Diagnosing maintenance system problems: Theory and a case study, Quality and Reliability Engineering International, Vol. 28, NO. 6 (2012), pp. 594-603. (ISI Journal)
- 11. T. Hajjari and S. Abbasbandy, A promoter operator for defuzzification methods, Australian Journal of Basic and Applied Sciences, Vol. 5, No. 10 (2011), pp. 1096-1105. (ISI Journal)
- 12. T. Hajjari and S. Abbasbandy, A note on "The revised method of ranking LR fuzzy number based on deviation degree", Expert Syst with Applications, Vol. 38 (2011), pp. 13491-13492. (ISI Journal)
- 13. S. Abbasbandy and T. Hajjari, An Improvement in Centroid Point Method for Ranking Fuzzy Numbers, J. Sci. I.A.U., Vol. 20, No. 78/2 (2011), pp. 109-119.
- 14. T. Hajjari, On deviation degree methods for ranking fuzzy numbers. Australian Journal of Basic and Applied Sciences, Vol. 5, No. 5 (2011), pp. 750-758. (ISI Journal)
- 15. T. Hajjari, Ranking of fuzzy numbers based on ambiguity degree, Australian Journal of Basic and Applied Sciences., Vol. 5, No. 1 (2011), pp. 62-69. (ISI Journal)
- 16. T. Hajjari, Approximation of fuzzy numbers via 0.5-Level and Mean core, Int. J. Appl. Math. Stat., Vol. 22, No. S11 (2011), pp. 69-78.
- 17. S. Abbasbandy and T. Hajjari, Weighted Trapezoidal Approximation-Preserving Cores of a Fuzzy Number, Comput. Math. Appl. Vol. 59 (2010), pp. 3066-3077. (ISI Journal)
- 18. S. Abbasbandy and T. Hajjari, A New Approach for Ranking of Trapezoidal Fuzzy Numbers, Comput. Math. Appl. Vol. 57 (2009), pp. 413-419. (ISI Journal)
- 19. T. Allahviranloo and T. Hajjari, Numerical Methods for Approximation of Fuzzy Data, Appl. Math. Comput., Vol. 169 (2005), pp. 16-33. (ISI Journal)

Publications in Persian Journal:

- 1. M. Alibeigi, GH. Erfani and T. Hajjari, Art in Mathematics and Mathematics in Art, Culture and Mathematics thinking, Vol. 54, (2015)
- 2. T. Hajjari and A. Shahvarani, Relation between History of Mathematics and Mathematics Education, Ettehad Journal (2006).
- 3. T. Hajjari and B. Savizi, Visualization, Visual Methods and its effect on Education, specially Mathematics Educations, Ettehad Journal (2005).
- 4. T. Allahviranloo and T. Hajjari, Historical Roots of Fuzzy Thinking and Genesis of Fuzzy Sets Theory, Ettehad Journal (2004).
- 5. T. Hajjari, Future and Mathematics Education, Entekhab Newspaper (2002).
- 6. T. Hajjari, Short Methods for Integral Calculations Journal of Al-Zahra University (1990).
- 7. T. Hajjari, Approximation of Ellipsoid Perimeter, Journal of Al-Zahra University (1990).

Books:

- 1. General Mathematics 2, Himeh Publishing (In Persian), Iran, 2013.
- 2. An Introduction to Discrete Mathematics, Fraranama Publishing (In Persian), Iran, 2012.
- 3. Research Method, Report and Thesis Writing, Fraranama Publishing (In Persian), Iran, 2012.
- 4. Recurrent Neural Network, "Ranking Indices for Fuzzy Numbers" Section 3, InTech Publishing, (In English), Croatia, 2012.
- 5. Abstract of History and Philosophy of Mathematics, age of ancient mathematics to fuzzy mathematics and Plato philosophy to humanism (In Persian), 2011.
- 6. English for Students of Mathematics (In English), 2011.

Reviewer of International Journals and Conferences

- Reviewers' Committee of IEEE CONCAPAN 2016 International Conference
- Journal of Intelligent and Fuzzy Systems
- Journal of Applied Mathematics and Computing
- Applied Mathematical Modelling
- African Journal of Business Management
- International Journal of Science and Technology
- Journal of Mathematical Extension
- Computers and Mathematics with Applications
- Mathematical Sciences
- Afrika Mathematika
- Iranian Journal of Fuzzy Systems
- Annual of Fuzzy Mathematics and Informatics