Name: Dr. M. Mullai

Designation: Assistant Professor in Mathematics

Contact	
Address	: Directorate of Distance Education
	Alagappa University
	Karaikudi – 630 003
	Tamil Nadu, INDIA
Employee Number	: 5 1 5 2 4
Date of Birth	: 25.06.1978
Contact Phone (Office)	: +91 4565 223391
Contact Phone (Mobile)	: +91 9159658866
E-mail(s)	: mullai78maths@gmail.com
University Email ID	: mullaim@alagappauniversity.ac.in
Aadhaar Number	: 7529 7703 5238

Academic Qualifications:

Course	Subject	University	Year of Completion	Class
PGDCA	Computer Applications	Alagappa University, Karaikudi	April 2001	Second
Ph.D.	Mathematics	Alagappa University, Karaikudi	December 2012	-
M.Phil.,	Mathematics	Alagappa University, Karaikudi	April 2002	First
M. Sc.,	Mathematics	Alagappa University, Karaikudi	April 2001	First

Teaching Experience: 15 Years

Research Experience: 11 Years

Additional Responsibilities

1. PG. Ladies Hostel Warden
2. PCP Co Ordinator
3. PPR Co Ordinator

Areas of Research

1. Algebra
2. Fuzzy Algebra
3. Operations Research
4. Mathematical Modelling
5. Neutrosophic sets(Neutrosophic graphs, neutrosophic adhoc networks..)

Research Supervision / Guidance

	Program of Study	Completed	Ongoing
Research	Ph.D.	-	04
	M.Phil.	15	2
Project	PG	72	-

Publications

International		National		Others
Journals	Conferences	Journals	Conferences	Books / Chapters / Monographs / Manuals/Patents
26	8	1	3	4

Cumulative Impact Factor (as per JCR): 2.12

h-index   : 06

i10 index   : 05

Total Citations   : 123

Funded Research Projects

Completed

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1	AURF	10.04. 2017	10.04. 2018	Studies on various filters in Fuzzy - Lattice	0.35
2	RUSA 2.0	17.09. 2019	Till date	Mathematical Modelling and Computational Intelligence	2.25

Ongoing

Events organized in leading roles

Number of Seminars / Conferences / Workshops / Events organized: 02

1. VelHumsci-06, A National Level Confernce, VelTech, Chennai, Apr' 2006.
2. National Webinar on Introduction to Matlab, Department of Mathematics, Alagappa University, Karaikudi, May'2019.

Events Participated

Conferences / Seminars / Workshops: 39

1. M.Mullai, National Level Seminar on Algerbaic and Analytic Methods, Department of Mathematics Alagappa University, 19.03.2005 & 20.03.2005.

2. M.Mullai, Vel – Humsci' 06 National Level Seminar, Department of Science & Humanities, Veltech, Chennai –62 -Apr' 2006.

3. M.Mullai, National Workshop on Stochastic Modeling in Computational Methods, Department of Mathematics CIT, Coimbatore.

4. M.Mullai, National Workshop on Soft Computing, Department of Mathematics GRU, Dindigul 21.01.2008 – 27.01.2008.

5. M.Mullai, National Level Seminar on Discrete Mathematics, Department of Mathematics, Alagappa Govt. Arts College 15.02.2008.

6. M.Mullai, National level Seminar on Fuzzy Mathematics and Its Applications, Department of Mathematics, Alagappa University, 03.03.2008 & 04.03.2008.

7. M.Mullai, State Level Seminar on Recent Trends in Optimization Techniques, Seminar Hall, Alagappa Govt. Arts College, 18.09.2008.

8. M.Mullai, State Level Seminar on Nano Science & Nano Technology, Department of biochemistry Ananda College Devakottai.

9. M.Mullai, International Conference on Stochastic Modelling, Department of Mathematics, Alagappa University, 12.02.2009 – 14.02.2009.

10. M.Mullai, National Level Seminar on Differential Equations, Department of Mathematics, Alagappa University, 06.03.2009-07.03.2009.

11. M.Mullai, National Level Seminar on Fuzzy Mathematics and its applications, Alagappa University, 09.03.2009.

12. M.Mullai, National Conference on Recent Trends in Engineering & Technology(SYNOPSE-2013), Sri Raaja Raajan College of Engineering & Technology, Amaravathipudur. 4th February-2013,

13. M.Mullai, One Day International Conference on Recent Trends in Discrete Mathematics and its Applications to Science and Engineering (ICODIMA 2013), Periyar Maniammai University, Thanjore, 3rd December-2013.

14. M.Mullai, National Seminar on "Role of LIS Professionals in Developing Information Literacy Skills in the Digital Era". Department of LIS, Alagappa University, Karaikudi, 19-20 March, 2015.

15. M.Mullai, Impact of Electronic Resources on Teaching, Learning and Research: Issues and Opportunities, Central Library & DDE, Alagappa University, Karaikudi, 24-25, April, 2015.

16. M.Mullai, A Two Day National Seminar on Safety and Security of Women and Girls in Public Spaces: Planning and Designing Mechanism, Department of Women's Studies, Alagappa University, Karaikudi,4-5 December 2015.

17. M.Mullai, Research Methods an Data Analysis Using SPSS (RMDA-2016),Thanthai Hans Roever College, Perambalur, 18th March, 2016.

18. M.Mullai, National Conference on Pure and Applied Mathematics, Department of Mathematics, Alagappa University, Karaikudi,30-31, March,2016.

19. M.Mullai, International Workshop and Conference on Analysis and Applied Mathematics, Department of Mathematics, NIT, Tiruchirappalli, 06-16, June, 2016.

20. M.Mullai, "Workshop on R with Application to Quantitative Finance", BITS, Pilani, Goa, 26.08.2016 to 28.08.2016.

21. M.Mullai, "ICSSR-Project Sponsored One day National level Workshop on Current Scenario of Educational Videogames in the Technological Era: Links with Problem Solving", 10th November, 2017.

22. M.Mullai & B. Balamurugan, International conference on Mathematical Computer Engineering, VIT University, Chennai Campus, , 3-4 Nov'2017.

23. M.Mullai & B. Balamurugan, 2nd international Conference on Smart Computing & Informatics(SCI-2018), Prasad V. Potluri Siddhartha Institute of Technology, Vijayawada, Andhra Pradesh, 27-28 Jan'2018.

24. M.Mullai, One Day Workshop on Design & Development of MOOCs for the Faculty Members of Alagappa University and Aliated Colleges Degital Education Cell,Alagappa University, Karaikudi, 8th november, 2018.

25. M.Mullai, International Conference on Discrete and Computational Mathematics, Alagappa University, 20&21, Dec'2018

26. M.Mullai, Two Day Workshop on Mathematical software for business applications-Hands on training & Maple for business applications-Hands on training, School of Mathematics & university business collaboration centre, Alagappa University, Karaikudi, 22, 26 Feb'2019.

27. M.Mullai, National level workshop on E-Content Development, Department of Education, DDE, Alagappa University, 18-22, Nov'2019.

28. M.Mullai, 2nd International conference on Mathematical Modelling and Computational Methods in Science and Engineering-2020, School of Mathematics, Alagappa University, 22-24 ,Jan'2020.

29. M.Mullai, One Day Workshop on Design & Development of MOOCs for the Faculty Members of Alagappa University and Aliated Colleges Degital Education Cell,Alagappa University, Karaikudi, 8th november, 2018.

30. M.Mullai, International Conference on Discrete and Computational Mathematics, Alagappa University, 20&21, Dec'2018

31. M.Mullai, Two Day Workshop on Mathematical software for business applications-Hands on training & Maple for business applications-Hands on training, School of Mathematics & university business collaboration centre, Alagappa University, Karaikudi, 22, 26 Feb'2019.

32. M.Mullai, National level workshop on E-Content Development, Department of Education, DDE, Alagappa University, 18-22, Nov'2019.

33. M.Mullai, 2nd International conference on Mathematical Modelling and Computational Methods in Science and Engineering-2020, School of Mathematics, Alagappa University, 22-24 ,Jan'2020.

34. M.Mullai, " Covid-19 General Awareness Programme Quiz", IQAC, Kasturi College of Education, Coimbatore, 30th April, 2020.

35. M.Mullai, National Webinar on Use of Elsevier Tools in Research Workflow, University of Madras, Chennai and Elsevier, 5th May, 2020.

36. M.Mullai, Webinar on Mathematical documentation and computation using online tools, 28-29, May'2020.

37. M.Mullai, International Webinar on Novel Approaches: Human Therapy and Nutrition, DDE and Microbiology Wing, Alagappa University, Karaikudi, 28-30, May'2020.
38. M.Mullai, Seven- Day webinar on Life of Cinema and Cinema for Life, Department of Theatre and Film Studios, Alagappa University, Karaikudi, 25-31, Aug'2020.
39. M.Mullai, National Webinar on Recent approaches and Human Genes against Covid-19. DDE Zoology Wing and Department of Animal health management, 6th nov'2020.

Other Training Programs: 08

1. UGC Sponsored Orientation Programme, Academic Staff college, University of Madras, Chennai, 05.11.2014 – 02.12.2014

2. UGC Sponsored Faculty Development Programme on Diversity in Teaching, AIM, Alagappa University, Karaikudi, 7-8, March, 2014.

3. Saksham – IT Champion Training Program, Alagappa University, Karaikudi, 19-25 January, 2015.

4. Refresher Course in Mathematics, UGC, HRDC, Pondicherry University, Puducherry, 07.09.2016 to 27.09.2016.

5. Three day online FDP on "Discriptive Statistics through R-Programming, KPR Institute of Engineering and Technology,26.05.2020-28.05-2020.

6. One week FDP on Geogebra, Department of Mathematics, R.k.College, Bihar, 6-12, May'2020.

7. Two Week online workshop on "Comprehensive E-Learning to E-Trading guide for Administrative Work", May 25- June 05, 2020.

8. Two Week Refresher Course in Mathematics, TLC, Ramanujan College, University of Delhi, 16-30 March'2021.

DDE Course materials:02

1. Differential Geometry Book

2. Optimization Techniques Book

Distinctive Achievements/Awards:02

1. Best Article Award'2018 for the paper entitled "Neutrosophic EOQ Model with price break" by Neutrosophic Science International Association(NSIA), University of New Mexico, Maths and Science Department, 705, Gurley Ave, Gallup NM 87301, USA, 7 February 2019 [International].

2. Best Article Award'2019 for the paper entitled "A Neutrosophic Technique Based Efficient Routing Protocol for MANET based on its Energy and Distance" by Neutrosophic Science International Association(NSIA), University of New Mexico, Maths and Science Department, 705, Gurley Ave, Gallup NM 87301, USA, 7 July 2020 [International].

Membership in

Professional Bodies

1. Life Member: IAENG

Editorial Board: 07

1. Reviewer in Tamkang Journal of Mathematics.(September-2016).
2. Reviewer in Asian Journal of Advanced Research and Reports.
3. Reviewer in International Journal of Neutrosophic Science
4. Reviewer in Neutrosophic sets and systems.
5. Reviewer in TWMS Journal of Applied and Engineering Mathematics.
6. Reviewer in Computational and Applied Mathematics Journal.
7. Editorial board member in Journal of Electrical and Electronic Engineering

Board of Studies: 01

Member in Board of Studies in Mathematics, DDE, Alagappa University, Karaikudi.

Other Co-Curricular and Extra - Curricular activities: 03

1. PCP Co- Ordinator for Mathematics, DDE, Alagappa University, Karaikudi.
2. UG-Valuation Board Chairman in Mathematics, DDE, Alagappa University, Karaikudi.
3. Warden, PG Women's Hostel, Alagappa University, Karaikudi.

Others: 01

1. Event Co-Ordinator in Cultural club from 2013 to 2015.

Resource persons/ Guest Lectures in various capacities

1. Number of Invited / Special Lectures delivered: Guest Lecture in Fuzzy Set Theory, Department of Mathematics, Dr. Umayal Ramanathan College for Women, Karaikudi, 26th February, 2016.

2. Guest Lecture in Application of differential equations, Faculty development and training programme on MA8151-Engineering Mathematics-I, Department of Mathematics, St. Michael College of Engineering and Technology, Kalayarkovil, 21st June, 2018.

3. Resourse Person, One day association meeting, PG department of Mathematics, Ananda College, Devakottai, 01.08. 2018.

4. Resource Person, International Conference on Challenges and Opportunities in Multi disciplinary Research (IC COMR - 2018), National University of Singapore, October 27-28, 2018, Singapore.

5. Guest Lecture in Application of Mathematics, Department of Mathematics, Nachaippa Swamigal Arts and Science College, Koviloor, Karaikudi, 04.03.2019.

Others

Chair Person in Conferences:

1. Chair Person in International Conference on Discrete and Computational Mathematics (ICDCM- 18), Department of Mathematics and Ramanujam Centre for Higher Mathematics, Alagappa University, Karaikudi, 20-21, December 2018.

2. 2nd International conference on Mathematical Modelling and Computational Methods in Science and Engineering-2020, School of Mathematics, Alagappa University, 22-24, Jan'2020.

Foreign Visit:

1. International Conference on Recent Trends in Humanities and Science (ICRTHS- 2018), October 25-27, 2018 at Universiti Tunku Abdul Rahman, Malaysia.
2. International Conference on Challenges and Opportunities in Multidisciplinary Research (IC-COMR-2018), October 27-28, 2018 at National University of Singapore, Singapore.

Recent Publications

Publications: 29

1. M.Mullai, (2009), " Fuzzy L-ideal ", Acta Ciencia Indica, 2009, Vol.XXXV M, No.2, 525-533.

2. M.Mullai, (2012), "Fuzzy L-filters", IOSR Journal of Mathematics (IOSRJM), Volume 1, Issue 3, 21-24.

3. M.Mullai, (2013), "Some Theorems on Fuzzy L-Ideals", Antarctica Journal of Mathematics, Vol. 10(2), 103-106

4. M.Mullai,(2013), "Fuzzy L-Quotient Ideals", International Journal of Fuzzy Mathematics and Systems, Vol. 3(3),179-187.

5. M.Mullai, (2016) "Prime fuzzy L-filters", International Journal of Applied Mathematical Sciences, Volume 9, Number 1, pp. 37-44.

6. M.Mullai, (2016), "Railway Route Optimization system using fuzzy Dijktra's Algorithm" , International Journal of Applied Mathematical Sciences ,Volume 9, Number 1, pp. 117-123.

7. K.Shanmuga Priya and M.Mullai,(2017), "SP-RING AND ITS PROPERTIES", International Journal of Mathematics Trends and Technology, vol.46(2).

8. M. Mullai, S. Broumi and A. Stephen,(2017), "Shortest path problem by minimal spanning tree algorithm using bipolar neutrosophic numbers", International Journal of Mathematics Trends and Technology, vol.46(2).

9. M. Mullai and A. Stephen, (2017), "Neutrosophic critical path analysis for project network", Asian Journal of Mathematics and Computer Research, 21(1): 28-35.

10. G.Madhan Kumar and M.Mullai, (2018), "Whether Government intervention and Vocational training increases Education and Employment? : A mathematical model", International Journal of Pure and Applied Mathematics, Volume 118 No. 10, 435-454.

11. G.Madhan Kumar and M.Mullai,(2018), "Stability analysis on the dynamics of poverty, corruption and diseases: A mathematical model", Asian Journal of Mathematics and Computer Research, 23(2): 104-123. [ISSN: 2395-4205 (Print), 2395-4213 (Online)]

12. M. Mullai and S. Broumi,(2018), "Neutrosophic inventory model without shortages", Asian Journal of Mathematics and Computer Research, 23(4): 214-219. [ISSN: 2395-4205 (Print), 2395-4213 (Online)]

13. M. Mullai and R. Surya,(2018), "Neutrosophic EOQ Model with Price Break", Neutrosophic Sets and Systems, Vol. 19: 24-28. [ISSN (print): 2331-6055, ISSN (online): 2331-608X, Impact Factor: 1.739] http://doi.org/10.5281/zenodo.1235249.

14. K.Shanmuga Priya and M.Mullai,(2018), " Direct product of SP-Algebra", Journal of Global Research in Mathematical Archives, Vol.5(5), 90-94.

15. B. Balamurugan and M. Mullai,(2018), "Analysis of a non-markovian group arrival Queue with balking and two types of Various services in call centers", Mathematical sciences international research journal, volume 7 spl issue 1, ISSN: 2278-8697.

16. M.Mullai & K.Shanmuga Priya.,(2018), Polynomials on SP-Ring., International Journal of Computer Science, 2018 M.Mullai & B.Balamurugan., Analysis of Non Markovian group arrival queue with balking and bernoulli Schedule server breaks in Call centers., International Journal of Pure and Applied Mathematics.

17. M. Mullai & B.Balamurugan.,(2019), Rejection and Breaks in Pharmaceutical Call Center, International Journal of Pharmaceutical Research.

18. M. Mullai & B.Balamurugan.,(2019), Non Markovian Priority Queue for Existing Customer with Breaks in Call Center, TEST Engineering and Management. https://doi.org/10.31838/ijpr/2019.11.04.036

19. M.Mullai & R.Surya.,(2019), Neutrosophic Project Evaluation and Review Techniques, Neutrosophic Sets and Systems, DOI: 10.5281/zenodo.2593903.

20. M.Mullai & S.Broumi., et.al.,(2019), A Neutrosophic Technique Based Efficient Routing Protocol For MANET Based On Its Energy And Distance., Neutrosophic Sets and Systems,DOI: 10.5281/zenodo.2593923.

21. M. Mullai., S. Broumi., et.al.,(2019), Single valued (2N+1) sided polygonal neutrosophic numbers and single valued (2N) sided polygonal neutrosophic numbers, Neutrosophic Sets and Systems, DOI: 10.5281/zenodo.2631502

22. M. Mullai., R. Surya., G. Madhan Kumar., & S. Broumi.,(2019), Neutrosophic Intelligent Energy Efficient Routing For Wireless Ad-Hoc Network Based on Multicriteria Decision Making, Neutrosophic Sets and Systems, DOI: 10.5281/zenodo.2593923.

23. M. Mullai & R. Surya.,(2019), Neutrosophic Inventory Backorder Problem using Triangular Neutrosophic Numbers, Neutrosophic Sets and Systems.

24. M. Mullai., S. Broumi., et.al.,(2020), A Single Valued neutrosophic Inventory Model with Neutrosophic Random Variable, International Journal of Neutrosophic Science (IJNS), Doi : 10.5281/zenodo.3679510.

25. M.Mullai & S.Broumi.,(2020), Dominating energy in Neutrosophic Graphs, International Journal of Neutrosophic Science, Doi:10.5281/zenodo.3789020.

26. M. Mullai., B.Bala murugan., et.al.,(2020), Brain–computer interface for assessment of mental efforts in e-learning using the nonmarkovian queueing model, Comput. Appl. Eng. Educ.;1–17, DOI: 10.1002/cae.22209. [I.F 1.790].

27. M. Mullai & B.Bala murugan., (2020), Non Markovian Priority Queue for Existing Customer with Breaks in Call Center, TEST Engineering and Management, ISSN: 0193 - 4120 PP. 7598 – 7610.

28. M.Mullai, S.Broumi & R.Jeyabalan.,(2020), Homomorphism and Isomorphism in strong neutrosophic graphs, International Journal of Neutrosophic Science.

29. M. Mullai & R. Surya.,(2020), Neutrosophic inventory model under immediate return for deficient items, Annals of Optimization Theory and Practice, Vol.3, Number 4, 1-9. DOI: 10.22121/aotp.2020.246194.1040.

Book Chapters: 03
1. M.Mullai., Domination in Neutrosophic Graphs, IGI Global Publications,USA, Nov'2019.
2. M. Mullai, K. Sangeetha,R. Surya& G. Madhan Kumar., A Single Valued neutrosophic Inventory Model with Neutrosophic Random Variable, NOVA Publishers,USA,2020.
3. M. Mullai, R. Surya & G. Madhan Kumar., Neutrosophic Economic Order Quantity Model with More Than One Price Breaks, NOVA Publishers,USA, May'2020.

Patents: 01
1. M.Mullai, B.Balamurugan et.al., Optimizing call center queuing system using non-morkovian modaels and customer interaction using natural language processing, Journal no. 19/2020 dated 08/05/2020.[National].

Proceedings:

1. M.Mullai, One day international conference on "Recent Trends in Discrete Mathematics and its Applications to Science and Engineering", ICODIMA 2013, pg. 43-50, December 3rd, 2013.
2. M.Mullai, International Workshop and Conference on "Analysis and Applied Mathematics", IWCAAM'16, pg.299, June 6-10, 2016.
3. M.Mullai, "Prime Fuzzy L-filters", NCPAM- 2016, Alagappa University, Karaikudi.
4. M.Mullai, "Railway Route Optimization System using Fuzzy Dijktra's Algorithm", IWCAAM -2016, NIT, Trichirappalli.
5. M.Mullai, Two day international conference on "Mathematical Computer Engineering", ICMCE-2017, pg. 42-44, November 3-4, 2017.
6. B. Balamurugan & M. Mullai, "Optimal planning of calls in call centers", Second National Conference On "Emerging Trends in Mathematical Sciences" (NCETMS-2017), S.A. Engineering College, Chennai.
7. G. Madhan kumar & M. Mullai, "Whether government intervention and vocational training increases education and employment?: A Mathematical Model", Second National Conference On "Emerging Trends in Mathematical Sciences" (NCETMS-2017), S.A. Engineering College, Chennai.
8. M.Mullai, A mathematical modelling on the impact of corruption in human population, International Conference on Computing Sciences, ICCS 2018, Pg.140.
9. M.Mullai, Polynomials on SP-Ring, International conference on "Algebra and Discrete Mathematics", ICDAM 2018, pg. 76-81, January 8-10, 2018.
10. M.Mullai and B.Balamurugan., A Condition Optimization Method For A Multiclass Queueing Model In Call Centre, 3rd International conference on Science, Technology, Engineering and Management(ICSTEM'19), Kalaignarkarunanidhi Institute of Technology, Coimbatore, pg. 210, March 22-23, 2019.

11. M.Mullai, B.Balamurugan and S. Selvakanmani., Call Loss Characteristics For Non Markovian Queueing Systems, 3rd International conference on Science, Technology, Engineering and Management(ICSTEM'19), Kalaignarkarunanidhi Institute of Technology, Coimbatore, pg. 210, March 22-23, 2019.

Papers Presented:

1. M.Mullai, (2008), "A study on center in complete lattice", National Level Seminar on Discrete Mathematics, Alagappa Govt. Arts College, Karaikudi.
2. M.Mullai, (2009), "Some theorems on Fuzzy L- Ideals" National Level Seminar on Fuzzy Mathematics & its Applications, Alagappa University, Karaikudi.
3. Homomorphism in Fuzzy L-Ideals,(ICODIMA 2013), Periyar Maniayammai University, Tanjore.
4. M.Mullai, (2016), "Railway Route Optimization System using Fuzzy Dijktra's Algorithm", IWCAAM -2016, NIT, Trichirappalli.
5. M.Mullai & P.K.Shanthi, (2016), "Homomorphism in Fuzzy L-Ideals", National seminar on Topological Graph Theory, JAC, Periyakulam.
6. M.Mullai & B. Balamurugan, (2017), " Analysis of a non-markovian group arrival queue with balking and Bernoulli schedule server breaks in call centers", International conference on Mathematical Computer Engineering, VIT University, Chennai Campus, , 3-4 Nov'2017.

7. M.Mullai & B. Balamurugan,(2018), "Skill based planning of calls in Call Centers", 2nd international Conference on Smart Computing & Informatics(SCI-2018), Prasad V. Potluri Siddhartha Institute of Technology, Vijayawada, Andhra Pradesh, 27-28 Jan'2018.

8. Presented a paper entitled Neutrosophic Inventory Model with Price Dependent Demand,International conference on Recent Trends in Humanities and Science, Department of Mathematics, Universiti Tunku Abdul Rahman, Malaysia, October 25-27, 2018.

9. M.Mullai and B.Balamurugan., A Condition Optimization Method For A Multiclass Queueing Model In Call Centre, 3rd International conference on Science,Technology, Engineering and Management(ICSTEM'19), KIT-Kalaignarkarunanidhi Institute of Technology, Coimbatore, March 22-23, 2019.

10. M.Mullai and B.Balamurugan., S. Selvakanmani., Call Loss Characteristics For Non Markovian Queueing Systems, 3rd International conference on Science, Technology, Engineering and Management(ICSTEM'19), KIT-Kalaignarkarunanidhi Institute of Technology, Coimbatore, March 22-23, 2019.