Dr. R. PANDIYARAJAN
Assistant Professor (Mathematics)
Department of Social Sciences

Contact

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ID Number	: RVSAC1401
Date of Birth	: 27.07.1981
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Academic Qualification   : M.Sc., M. Phil., Ph.D., Postdoctoral Associate

Teaching Experience   : 9 Years 10 Months

Research Experience   : 6 Years

Area of Specialization / Interest:

Fuzzy Clustering, Data Analysis, Numerical Analysis, Mathematical Computing

Publications:

International		National		Others	
Journals	Conference	Journals	Conference	Book Chapters	Books
9	9	0	1	1	0

Patent Files / Published: Nil

Achievements & Awards: 4

- **Jawaharlal Nehru Scholarships for Doctoral Studies"-** awarded by Jawaharlal Nehru Memorial Fund, New Delhi
- Travel grant received from **DST** and **CSIR** under the scheme of Young scientist for attended the 3rd International Conference on Intelligent & Advanced Systems held at Malaysia
- "**Best Scientific Researcher Award**" given by the Association of Scientists, Developers and Faculties (ASDF), Pondicherry, on 30th December 2012.
- "**Best Poster Cum Paper Award**" received for the SPIE Medical Imaging 2013 conference held at Florida, USA on Feb. 9-14, 2013

Events Organized (Workshop / Seminar / Conference): Nil

Events Participated (Workshop / Seminar / Conference): 40

Sl. No	Title of the Events	Date	Venue / Organized by
1	Training programme on Value Added Course on Writing Research Paper in LaTeX	31 October -12 November 2022	Department of Mathematics Govt. V. Y. T. PG. Autonomous College, Durg
2	Webinar Innovative Parameters on Graphs	15th October 2022	SIMATS School Of Engineering,Chennai
3	Seminar on Algebraic graph theory	13th October 2022	Vellore Institute of Technology, Chennai
4	Summer school on Theoretical Foundations of Computer Science – School on Data Privacy	11-15 July 2022	Indian Institute of Information Technology, Bangalore
5	International Webinar on Numerical Explosive Combustion Models: Multiplicity and simulations	8th April 2022	Department of Mathematics, Mahav Rachna University, Haryana
6	International E-seminar on Advances in Mathematical Sciences	14-16 March 2022	Department of Mathematics, Central University of Karnataka, Kulaburgi
7	Lecture Series on "ANVESHAN,"	20-24 December 2021.	Department of Mathematics, SRMS College of Engineering & Technology, Bareilly
8	workshop on "Wavelets and its applications: Image Processing, Data Science and PDEs"	6th-10th December 21	Department of Mathematics, Manav Rachna University, Faridabad in collaboration with

			Department of Mathematics, IIT, Indore
9.	Webinar on "Operations Research through Microsoft Excel and Solver"	23rd October 2021	Anjuman I-Islam's Kalsekar Technical Campus, New Panvel
10	Webinar on "Modern Trends in Information Technology"	15th-19th November 2021	Department of Computer Science, Sacred Heart College, Tirupattur
11	Webinar Series on Application of Stochastic Models and Queuing Theory"	October 11-November 11, 2021	Department of Mathematics, Central University of Rajasthan, Rajasthan
12	Webinar on "Applications of Mathematical Sciences"	29 June 2021	Department of Mathematics and Statistics, St. Joseph's College for Women Visakhapatnam on
13	Workshop on "India's National Education Policy 2020"	26th March 2021.	Teaching Learning Centre, Coimbatore Institute of Technology, Coimbatore
14	Seminar on "e-Learning and Their Challenges with Solutions"	6 March 2021	Department of Computer Science & Application, Government College Timarni,Dist-Harda
15	Seminar on "The Importance of Analogies and Counterexamples in Mathematics"	20 February 2021.	Department of Mathematics, Government College Timarni,Dist-Harda
16	Webinar on "Real Analysis"	19-20 January 2021	Department of Mathematics, Maris Stella College, Vijayawada
17	Webinar on "Mathematical Modeling using Maple"	27th November 2020	Teaching Learning Centre, Coimbatore Institute of Technology, Coimbatore
18	Webinar on "Neutrosophic Decision Making"	19th October 2020	Department of Mathematics, Bannari Amman Institute of Technology, Sathyamangalam
19	Webinar on "How to make an E-Quiz and Delivered E-Certificate"	September 20, 2020	Gina Devi Shodh Sansthan, Bhiwani, Haryana
20	workshop on "Video Creation"	4th September 2020	Teaching Learning Centre, Coimbatore Institute of Technology, Coimbatore
21	Webinar on "Sampling"	23rd August 2020	SAGE University, Indore

22	Webinar On "Sampling"	22nd August 2020	Deparment of Economics, Lumding College, Assam
23	Webinar on "Role of Mathematics in Cyber Security"	15th August 2020	Career Development Centre, Perambra, Kerala
24	Webinar on "Application of Statistical Models in Agricultural Sciences-An Overview"	12th August 2020	Department of Agricultural Economics, Agricultural College and Research Institute, Madurai
25	Webinar on "The Role of Applied Mathematics in Present Global Crises"	5th-7th August 2020	Department of Applied Mathematics with Oceanology and Computer Programming, Vidyasagar University, Midnapore
26	Webinar on "Online Teaching-A new Approach"	31st July 2020	St Xavier's College for Women, Aluva
27	Webinar on "Open Education Resources and Google Cite Creation"	27th-28th July 2020	DMI-St.John the Baptist University, Republic of Malawi, Central Africa
28	Webinar on "Mathematics for Epidemiology"	24th July 2020	Department of Applied Sciences, Maulana ABUL Kalam Azad University of Technology, West Bengal
29	Webinar on "Statistics Automation in MS-Excel"	18th July 2020	Department of Mathematical Sciences, Sree Vidyanikethan Degree College, Tirupati
30	Webinar on "Mathematical Approach of Solute Transport Modelling"	27th June 2020	Department of Applied Sciences, KIET Group of Institutions, Lucknow
31	Webinar on "Human Resource Planning-A Stochastic Approach"	25th June 2020	Department of Science and Humanities, CMS College of Engineering and Technology, Coimbatore
32	Webinar on "Promoting Career opportunities in Statistics and Data Analytics"	22nd June 2020	Department of Statistics, Government Arts College, Salem
32	Webinar on "Emerging Trends and Techniques in E-Agriculture"	17th June 2020	RVS Agricultural College, Thanjavur
33	Webinar on "Exploring Advances in Graph Theory"	15th -17th June 2020	PG and Research Department of Mathematics, Loyola College
34	Webinar on "How to create course and course activities in open source online learning"	14 June 2020	Department of Mathematics, Hindu College, Guntur

35	Webinar on "Artifical Intelligence"	29th May 2020	Atma Ram Sanatan Dharma College, Dhaula Kuan
36	Webinar on "LATEX-Learning by doing"	15-16th May 2020	PG and Research Department of Mathematics, Idhaya College for women, Kumbakonam
37	Webinar on "The Man Who Knew Infinity"	26th April 2020	Department of Mathematics, St Xavier's College for Women, Aluva
38	National workshop on Mathematical Modeling and Computational Mathematics	Feb. 23-28, 2009	Department of Mathematics, Ganghigram Rural University, Ganghigram.
39	National Seminar on Recent Trends in Nonlinear Differential Equations and Dynamical Systems	March 24-25, 2006	PSG College of Arts and Science, Coimbatore
40	Seminar on mathematical carrier openings in teaching and research, Management and Industry	September 11-12, 2000	Department of Mathematics, R. K. M. Vivekananda College, Chennai.

FDP / Training Programs: 31

Sl. No	FDP Name	Date	Conducted by
1	FDP on Recent research area and its applications in Mathematics	10-15 October 2022	Vel Tech Multi tech Dr. Rangarajan and Dr. Sakuthala Engineering College
2	Data Science with Statistical Methods using R Programming-Basic Course	10th-14th January 2022	Amity University Uttar Pradesh, Lucknow
3	Computational Mathematics and Artificial Intelligence for Engineers	13th-17th December 2021	Dayananda Sagar College of Engineering, Bengaluru
4	The Role of Linear Algebra in Machine Learning, Artificial Intelligence and Data Science	29 November-3rd December 2021	Departments of Mathematics and Humanities, Computer Science Engineering and Information Technology, Mahatma Gandhi Institute of Technology, Hyderabad

5	Statistical and Optimization Techniques Using Software Packagaes	25-29 October 2021	Aligarh Muslim University, Aligarh
6	Recent Trends in Artificial Neural Networks	21th -25th September 2021	J.K.K.Nataraja College of Arts and Science, Komarapalayam
7	Software tools for Mathematical Education" Organized by Department of Mathematics	30th August -5th September 2021	Bannari Amman Institute of Technology, Sathyamangalam
8	Recent Trends in Mathematics	9th-10th September 2020	Department of Mathematics, Dr.M.G.R. Educational and Research, Adayalampattu Phase II Campus
9	SAGEMATH	10th-14th August 2020	Department of Basic Sciences and Department of Master of Computer Applications, Amal Jyothi College of Engineering, Kerala
10	Recent Trends in Applicable Mathematics	21st-31st July 2020	Department of Mathematics, Karunya Institute of Technology, Coimbatore
11	Application of Mathematics in Engineering	20th-25th July 2020	Department of Mathematics, KPR Institute of Engineering and Technology, Coimbatore
12	E-Contents and ICT Tools for Innovative and Effective Teaching	15th-21st July 2020	KS Jain Institute of Engineering and Technology, Ghaziabad
13	Teaching –Learning process for Beginners during COVID -19 Pandemic	14th-19th July 2020	Department of Mechanical Engineering, Visvesvaraya National Institute Technology, Nagpur
14	International Training Programme on Application of SPSS for Data Analysis	11th June- 10th July 2020	Eudoxia Research Centre, India
15	Personality Development and Human Values	6th-10th July 2020	Vinayaka Missions Annapoorana College of Nursing, Salam
16	ICT based Teaching and Learning	1st-5th July 2020	Roorkee College of Polytechnic, Roorkee
17	Importance of Mathematics in Science and Technology	25th-29th June 2020	Department of Basic Sciences and Humanities, GMR Institute of Technology, Rajam

18	Role of Latex in Scientific Writing	19th -21st June 2020	Department of Mathematics, Babu Banarasi Das Northern India Institute of Technology, Lucknow, Ghaziabad
19	Artificial Intelligence and Data Science	10th -14th June 2020	Department of Information Technology, Oriental Institute of Science and Technology, Bhopal
20	Techniques and Applications in Teaching Engineering Mathematics	10th -11th June 2020	K. Ramakrishnan College of Engineering, Trichy
21	Recent Trends in Applied Mathematics	2nd -6th June 2020	Department of Mathematics, SNS College of Technology, Coimbatore
22	Skilling Teachers for Online Education	2nd -6th June 2020.	Department of Humanities, Uka Tarsadia University, Gujarat
23	Moodle Learning Management System	2nd -6th June 2020	Department of Computer Science, Government Arts College for Women, Salem in Association with IIT Bombay Spoken Tutorial
24	Mathematical Modeling in Multidisciplinary Domain	1st -7th June 2020	Department of Mathematics, Bannari Amman Institute of Technology, Sathyamangalam
25	Recent Trends in Computational Mathematics	27th -29th May 2020	Mohamed Sathak A.J. College of Engineering, Chennai
26	Statistical Application Using SPSS	16th -17th May 2020	Shasun Jain College for Women, Chennai
27	Documentation of Graph using LaTex	13th May 2020	C. Abdul Hakeem College of Engineering and Technology, Vellore
28	Training Programme on Basics of Matlab	22nd April-5th May 2020	K.S. Rangasamy College of Arts and College, Tiruchengode
29	QIP Short Term Course on Finite Elements: Methods & Error Estimation	Feb 22-28,2018	Department of Mathematics & Statistics Indian Institute of Technology Kanpur
30	Advanced Training Mathematics School	22nd Dec 2011 to 6th Jan 2012	Harish-Chandra Research Institute, Allahabad
31	Fourth DST-SERC school on Systems and Cognitive Neuroscience	21st Feb to 6th March 2011	National Brain Research Center, India

Resource Person / Invited Talks / Other Representations: Nil

Memberships:

- Active Life Member to the International Association of Engineers
- Advisory Board Member to the Journal of Artificial Intelligence
- Advisory Board Member to the World Journal of Radiology

List of Publication

International Journal

1. "Association between Computed Tissue Density Asymmetry in Bilateral Mammograms and Near-term Breast Cancer Risk", ***Breast** Journal*, 2014 Mar 27. doi: 10.1111/tbj.12255. (**SCI index**) Impact factor 1.433

2. "Prediction of Near-term Breast Cancer Risk Based on Bilateral Mammographic Feature Asymmetry", *Academic Radiology*, 2014 (**SCI Index**) Impact factor 2.077

3. "Optimization of a Computer-aided Detection Scheme using a Logistic Regression Model and Information Gain Feature Selection Method", *Global Journal of Breast Cancer Research*, Vol. 1 No 1, Pages 1-7, 2013.

4. "Modified Fuzzy C-Mean Algorithm for Segmentation of T1-T2 Weighted Brain MRI," *Journal of Computational and Applied Mathematics,* Vol. 235(6), Pages 1578-1586, 2011. (**SCI Index**) Impact factor 1.077

5. "Modified bias field Fuzzy C-Means for Effective Segmentation of Brain MRI," *LNCS Transactions on Computational Science (Springer),* VIII, LNCS 6260, pp. 131–149*,* 2010**. ISSN: 1866-4733**

6. "Improved Fuzzy Clustering Algorithm in Segmentation of DC-Enhanced breast MRI," *Journal of Medical Systems (Springer)***,** DOI 10.1007/s10916-010-9478-z, 2010. (**SCI Index Expanded**) Impact factor 1.372

7. Effective Fuzzy C-Means Based Kernel Function in Segmenting Medical Images, *Computers in Biology and Medicine*, Vol. 40(6), Pages 572-579, 2010. (**SCI Index**) Impact factor 1.475

8. "Improved Fuzzy Clustering Segmentation for Medical Images," *Neural Network world,* No3, Vol. 10, pp. 417-426, 2010. **(SCI Index Expanded)** Impact factor 0.412

9. "Fuzzy clustering Approach in segmentation of T1-T2 brain MRI," *International Journal of Recent Trends in Engineering*, Vol. 2, No1, Page 157-160 (November), 2009.

10. "Fuzzy Model in Decision making of Alternatives," *Advances in Fuzzy sets and Systems,* Volume 3(1), Page 1-19 (February), 2008.

International/ National Proceedings

1. Unsupervised clustering techniques: New approach on Fuzzy C-Means," *Proceeding of the Second International Conference on Cognition and Recognition,* Pages 525-532, April 10-12, 2008, ISBN: 978-81-8424-307-9. Allied Publishers Pvt. Ltd., India.

2. "Fuzzy clustering algorithm: A study on an objective function," *Proceeding of Annual 6th International conference on Information Science Technology and Management,"* Pages 71-18, 2008, ISBN: 978-1-935160-02-1, www.cistm.org.

3. "Fuzzy Clustering Techniques for Analyzing Border between Tissues in Medical Images," *Proceeding of the International Conference on Advanced Computing and Communication Technologies for High Performance Applications,"* Pages 901-912, September 24-26, 2008.

4. New Modified Fuzzy C-Means for Determination of Proper Structure in Dataset" paper has been published in "*Proceedings of the International Conference on Computing, Communication and Control,"* ISBN: 978-1-60558-351-8, Pages 177-181, 2009 Web: http://portal.acm.org/citation.cfm?id=1523140.

5. "New Robust Fuzzy C-Means Based Gaussian Function in Classifying Brain Tissue Regions," *IC3 2009, CCIS 40, pp. 158–169, 2009, Springer-Verlag Berlin Heidelberg 2009,* ISBN**:** 978-3-642-03546-3*.*

6. Effective fuzzy c-mean clustering technique for segmentation of T1-T2 brain MRI, in ARTCom09, ISBN: 978-1-4244-5104-3, *Proceeding in IEEE Digital Library,* pp. 537-539, DOI: 10.1109/ARTCom.2009.63.

7. Robust Fuzzy C-Means Based for Medical Images, in ***Proceeding of UGC Sponsored National conference on Recent Trends in Information Technology***, ISBN: 978-93-80026-82-4, I.K International Publishing House (P) Ltd.

8. Effective Weighted Bias Fuzzy C-Means in Segmentation of Brain MRI in ***Proceeding of IEEE,*** **ISBN: 978-1-4244-6624-5,** 2010**.**

9. Modified Approach to Fuzzy Entropy Clustering Method with Adjustable Membership Characteristics for Image Segmentation at ***Proceeding of Second International Conference on Computer Applications***, ISBN: 978-81-920575-4-5, 2012.

10. Prediction of Near-term Breast Cancer Risk using a Bayesian Belief Network in ***Proceeding of SPIE 2013,*** 8673-50 V1 Page 1-7

Additional / Special Qualification   if any: Nil