Dr. J. Sutha, B.E.,M.E., Ph.D.

Professor,

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Dr.J.Sutha is working as Professor in the Department of CSE at SRMIST, Ramapuram campus. She holds a Ph. D degree in the field of Image Processing and Artificial Intelligence from Anna University, Chennai since 2008. She has more than 27 years of teaching and research experience in Engineering colleges as a Leader, teacher, researcher and administrator, and an education expert with well experience in fronting NBA, NAAC, Research, Autonomous and ISO. She is a veteran teacher, an excellent administrator and competent person along with intellectual working skills and good programming skills. She is a recognized supervisor in Anna University, Chennai. She has produced 9 Ph.D graduates to her credit in the research domains like image processing, machine learning and deep learning, wireless sensor networks. She has published more than 75 articles in reputed National and International Journals and Conferences.

Area of Research:

Image Processing, Machine Learning and Deep Learning

Selected Publications:

1. G Vaira Suganthi ,J Sutha, M Parvathy & N Muthamil Selvi (2023), "Genetic algorithm for feature selection in mammograms for breast masses classification" Computer Methods in Biomechanics and Biomedical Engineering, Imaging and Visualization, Taylor and Francis, Published online 19th October 2023.

2. Sutha J, (2023) published a book chapter titled "Nearest- Neighbor based Earth observation and monitoring," in the book titled "Novel AI Applications for Advancing Earth Sciences", IGI Global Publishing.

3. Poomani Alias Punitha M., Dr. Sutha J, Dr. Ruba Soundar K (2021), "Wiener filter based deep convolutional network approach for classification of satellite images", Journal of Ambient Intelligence and Humanized Computing, – An International Journal, Available from : https://doi.org/DOI 10.1007/s12652-020-02410-3, Print ISSN1380-7501 Impact Factor – 7.104. Vol 12, Issue 7, pages 7343–7351 (July 2021).

4. Vaira Suganthi, G, Sutha, J, Parvathy, M & Durga Devi, (2020), 'Pectoral Muscle Segmentation in Mammograms', Biomedical and Pharmacology Journal. Vol.13, no.3, pp. 1357 - 1365. September 2020, ISSN: 0974-6242, IF-0.8. DOI: https://dx.doi.org/10.13005/bpj/2005.

5. Vaira Suganthi, G, Sutha, J, Parvathy, M & Durga Devi, C (2020), 'Deep Learning Algorithm for Breast Masses Classification in Mammograms', 'Deep Learning Algorithm for Breast Masses Classification in Mammograms', IET Image Processing, Volume 14, Issue 12, October 2020, pp. 2860 - 2868, IF-2.004(1.995) . DOI: 10.1049/iet-ipr.2020.0070.

6. Vaira Suganthi, G, Sutha, J, Parvathy, M 2020, 'A Survey on Machine Learning Algorithms for the Diagnosis of Breast Masses with Mammograms', Current Medical Imaging, Vol.16, no.6, pp. 639-652. ISSN: 1573-4056. IF-0.533. DOI: 10.2174/1573405615666190903141554

7. Pandeeswari B, Dr. Sutha J, Dr. Parvathy M (2020), "A novel synthetic aperture radar image change detection system using radial basis function-based deep convolutional neural network", Journal of Ambient Intelligence and Humanized Computing, – An International Journal, Available from : https://doi.org/10.1007/s12652-020-02091-y, Published Online – May 2020, ISSN - 1868-5137. Impact Factor - 1.2.

8. Krishnaveni P, Dr. Sutha J, (2020), "Novel deep learning framework for broadcasting abnormal events obtained from surveillance applications", Journal of Ambient Intelligence and Humanized Computing, – An International Journal, Available from : https://doi.org/10.1007/s12652-019-01668-6, Published Online – January 2020, Print ISSN 1868-5137 Impact Factor - 1.2.

9. Poomani Alias Punitha M., Dr. Sutha J, (2019) "Object based classification of high resolution remote sensing image using HRSVM-CNN classifier", European Journal of Remote Sensing, – An International Journal, Available from : https://doi.org/10.1080/22797254.2019.1680259, Published Online , October 2019, ISSN: (Print) 2279-72541380-7501. Impact Factor - 1.2.

10. Krishnaveni P, Dr. Sutha J, (2019), "Performance Analysis of Two-Optimal Methods for Shortest Path Cost Analysis and Route Aggregation for Object Tracking Applications in WSN", Caribbean Journal of Science, Volume 53, ISSUE 2, ISSN: 0008-6452, (MAY - AUG), 2019.

11. K. A. Shaheer Abubacker; Dr. Sutha J, (2019) "A simple multi-feature based stereoscopic medical image retrieval system", Polish Journal of Medical Physics and Engineering,

The Journal of Polish Society of Medical Physics, Vol 25, Issue 2, ISSN 1898-0309, doi: 10.2478/pjmpe-2019-0017, June 2019.

12. Sheeja R, Sutha J, (2019), "Soft fuzzy computing to medical image compression in wireless sensor network-based tele medicine system", Multimedia Tools and Applications – An International Journal, Available from : https://doi.org/10.1007/s11042-019-7223-2, Published Online, Print ISSN1380-7501, Online ISSN1573-7721.

13. Abitha Kumari D, Sutha J, (2018), "An Efficient Encoder Architecture Design for Cognitive Radio Networks", Wireless Personal Communications – An International Journal, Vol. 103, No. 4, pp.3181-3188, ISSN 0929-6212. DOI 10.1007/s11277-018-6001-1. Impact Factor - 1.2.

14. Krishnaveni P & Sutha, J, (2018), 'Performance analysis of Two-Optimal method for Shortest Path Cost Analysis and route aggregation for object tracking applications in WSN', Journal of Web Engineering, Vol. 17, No. 6, pp.2130 – 2146, ISSN: 1540-9589. Impact Factor - 0.311.

15. Deepa, J & Sutha, J, (2018), 'A New Energy Based Power Aware Routing Method For Manets', Journal of Cluster Computing, An International Journal, Vol. 22, No. 6, pp. 13317-13324. Doi.Org/10.1007/S10586-018-1868-X, Print Issn 1386-7857, Impact Factor-2.040.

16. Deepa. J, Sutha J., (2017), "Efficiently multicasting medical images in mobile Adhoc network for patient diagnosing diseases", Paper published in the International Journal of Biomedical Research, ISSN 0970-938X, Special Issue, pp.S315-S320.

17. Jasmine J., Sutha J., (2017), "Design of fault tolerance environment in optical networks", Paper published in the Int. J. Biomedical Engineering and Technology, Copyright © 2017 Inderscience Enterprises Ltd., Volume 25, Number 2/3/4, 2017, pp. 326-335.

18. Jeno Jasmine J., Sutha J., (2017), "Max-Weighted Routing and Wavelength Assignment Algorithm in Optical Networks", Paper published in the International Journal of Innovative Science and Research Technology, ISSN: 2456 –2165 , Volume 2, Number 11, November 2017, pp. 62-65.

19. Mrs. D. Abitha Kumari, Sutha J., (2017),"Performance Analysis of an Efficient Architecture for Interference detector in Cognitive Radio Networks", Paper published in the Asian Journal of Research in Social Sciences and Humanities, Vol. 7, No. 2, February 2017, pp. 1036-1046. ISSN 2249-7315. A Journal Indexed in Indian Citation Index DOI NUMBER:10.5958/2249-7315.2017.00146.0

20. Mrs. D. Abitha Kumari, Sutha J., (2016), "Low Power Interference Detection and Cancellation Architecture for Cognitive Radio Networks", Paper published in the International Journal of Printing, Packaging & Allied Sciences, Vol. 4, No. 5, December 2016

21. Jeno Jasmine J., Sutha J., (2016), " Efficient Data Transmission for Long-Haul Using Alternate Path Decision Algorithm", Paper published in the Journal of Medical Imaging and Health Informatics, ISSN: 2156-7018 (Print): EISSN: 2156-7026 (Online), Volume 6, Number 8, December 2016, pp. 1997-1999. DOI: https://doi.org/10.1166/jmihi.2016.1963.

22. K. A. Shaheer Abubacker; J. Sutha, (2016), "A Generic Framework for Content based Image Retrieval and Similarity Re-ranking of Volume Rendered Stereoscopic 3D Medical Images", Paper published in the Asian Journal of Research in Social Sciences and Humanities, Vol. 6, No. 12, December 2016, pp. 411-429. ISSN 2249-7315. A Journal Indexed in Indian Citation Index DOI NUMBER:10.5958/2249-7315.2016.01300.9.

List of Books authored / published :

Sl. No.	Title of the Book	Year of Publication
1	Computer Programming	2006
2	Programming with C	2007
3	Fundamentals of Computing and Programming	2008
4	Computer Practice Laboratory	2010
5	Computer Practice Laboratory – II	2011
6	Computer Practice Laboratory – I	2013
7	Computer Programming Laboratory – I	2014
8	Computer Programming Laboratory – II	2015
9	Computer Programming	2015
10	Computer Programming Laboratory	2015
11	Engineering Fundamentals Laboratory	2015

Funds Received from Govt./Research organizations :

Sl.No.	Consultancy, training, testing, R&D projects	Name of the funding agency	Amount (in Rs.)	Duration of the project	
				From	To
1.	National Seminar on "Recent Challenges in Intelligent Pervasive Computing"	DRDO	25,000	28.4.2008	29.4.2008
2.	Second National Conference on "Hi-Tech Trends in emerging Computational Technologies"	AICTE	1,25,000	8.5.2008	9.5.2008
3.	National Seminar on "Recent Research Directions in Wireless Networks"	DRDO	35,000	23.4.2009	24.4.2009
4.	Staff Development Programme on "Advanced Internet Programming Techniques"	AICTE	2,00,000	8.6.2009	20.6.2009
5.	Fifth National Conference on "Hi-Tech Trends in emerging Computational Technologies"	DRDO	30,000	22.3.2011	23.3.2011
6.	National Seminar on "Application of Nanotechnology to Energy, Environment and Biotechnology"	CSIR	20,000	1.7.2011	2.7.2011
7.	Sixth National conference on "Hi-tech Trends in Emerging Computational Technologies"–SITCON 2012.	AICTE	70,000	20.2.2012	21.2.2012
8.	Sixth National conference on "Hi-tech Trends in Emerging Computational Technologies-PHASE II" – SITCON 2012.	DRDO	35,000	29.3.2012	30.3.2012
9.	Staff Development Programme on "Recent Advances in Mobile and Pervasive Computing"	AICTE	5,60,000	7.5.2012	18.5.2012
10.	MODROBS - Object Oriented Analysis and Design Lab.	AICTE	5,00,000	22.3.2012	22.3.2013
11.	National seminar on "Security Issues in Mobile Ad-hoc Networks"	DIT	50,000	2.8.2012	3.8.2012

Sl.No.	Consultancy, training, testing, R&D projects	Name of the funding agency	Amount (in Rs.)	Duration of the project	
				From	To
12	National Seminar on "Information Security Issues & Solutions"	DRDO	40,000	7.12.2012	8.12.2012
13	Faculty Development Training Programme on "CS 61 – Artificial Intelligence"	Anna University Chennai	70,000	3.12.2012	9.12.2012
14	National Seminar on "Cyber Crime & Forensic Tools"	CSIR	50,000	10.12.2012	11.12.2012
15	Technical Project Exhibition on "Computer Communication and Information technologies" under Innovation Promotion scheme	AICTE	2,00,000	7.10.2013	11.10.2013
16	International conference on "Hi-Tech Trends in Emerging Computational Technologies" – ICECT – 2014	AICTE	1,75,000	20.2.2014	21.2.2014
17	Faculty Development Training Programme on "CS2303 – Theory of Computation"	Anna University Chennai	60,000	12.06.2014	18.6.2014
18	National Seminar on "Research Challenges in Space Science and Remote Sensing"	ISRO	50,000	23.04.2015	24.4.2015
19	State Level Science Exhibition for School Students	TNSCST	25,000	14.10.2015	14.10.2015
21	Faculty Development Programme on "Cyber Forensics and Information Security"	AICTE	7,00,000	-	-
22	State Level Science and Environmental Awareness Exhibition for School Students	TNSCST	20,000	-	-
23	National Seminar on "Deep Learning for Medical Image Analysis – Challenges and Future"	CSIR	40,000	29.4.2019	30.04.2019
24	State Level Science and Environmental Awareness Exhibition for School Students	TNSCST	20,000	26.7.2019	27.7.2019

Sl.No.	Consultancy, training, testing, R&D projects	Name of the funding agency	Amount (in Rs.)	Duration of the project	
				From	To
25	Project Titled "Classification of mushrooms based on their Edibility"	TNSCST	7,500	1.1.2023	15.5.2023
26	Technical Project Exhibition on Emerging Computer and Communication Technologies	TNSCST	15,000	22.9.2023	22.9.2023

Awards /Prizes received :

Sl .No.	Award	Award Sponsored By
1	R & D award for the project titled Design and Development of Neural Network based handwritten character recognition system	Sethu Educational Trust
2	R & D award for the project titled Offline Tamil Handwritten Character Recognition using Neural Networks	Sethu Educational Trust
3	Appreciation Award for Ten Years' Service in Sethu Institute of Technology	Sethu Institute of Technology
4	Certificate of Recognition Award - Top 50 distinguished HoDs CSE/IT department in higher education across India for the year 2019	The Academic Council of uLektz, Wall of Fame. (An initiative to identify, recognize and award the contributors of higher education)

Details of Research Scholars Completed Ph.D. under my Guidance

Sl. No.	Name of the Ph.D Research Scholar & AU Register number	Title of the Thesis	Viva date/Year of Completion
Supervisor : Dr.J.SUTHA			
1.	Dr.D.Abitha Kumari 20117401086	Low Power Interference Detection and Cancellation Architecture for Cognitive Radio Networks	05.07.2019
2.	Dr.J.Jeno Jasmine 2011140173	Efficient Routing and Wavelength Assignment in Optical Networks	10.01.2020

Sl. No.	Name of the Ph.D Research Scholar & AU Register number	Title of the Thesis	Viva date/Year of Completion
3.	Dr.Shaheer Abubacker 20117401007	Content Based Image Retrieval on Large Medical Stereoscopic image Database	09.03.2020
4.	Dr.M. Poomani @ Punitha 1222489720	Analysis on the Classification of High Resolution Remote Sensing Images using Object Oriented Technique	03.09.2020
5	Dr.P. Krishnaveni 2011140157	Energy Efficient Route Optimization and Aggregation in Wireless Sensor Network Applicable for Object Tracking	25.09.2020
6.	Dr.J.Deepa 2011140155	Efficient Routing Schemes for Mobile Ad Hoc Networks	28.10.2020
7.	Dr.R.Sheeja 20117401080	Optimizing the Energy Consumption and Lifetime Improvement in Wireless Sensor Network using Genetic Algorithm	12.01.2021
8.	Dr.B.Pandeeswari 1323489242	Change Detection in Synthetic Aperture Radar Images	05.04.2021
9.	Dr.G.Vaira Suganthi 1324489309	Multiview Computer Aided Detection System for the Classification of Breast Masses in Mammograms	30.04.2021

Professional Bodies:

1. The Indian Society for Technical Education (ISTE) (Life Membership ID: LM 31099)

2. Life member in Institution of Engineers (IE) (Membership ID: M-1689066)

3. Member in Computer Society of India : Membership ID : F80022992

Google Scholar : https://scholar.google.com/citations?user=5Szx3rkAAAAJ&hl=en

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