



SRIRAMAKRISHNA INSTITUTE OF TECHNOLOGY
(An Autonomous Institution)

Ph.D Supervisor Details

1. Name of the Faculty:	Dr.S.NAGARANI
2. Designation:	Professor
3. Department:	Science & Humanities (Mathematics)
4. Anna University Ref. No. for Supervisor Recognition:	2970057
5. Title of Ph.D. Thesis:	Swarm Intelligence Based Dynamic Subcarrier, Bit and Power Allocation for OFDMA Relay Networks
6. Faculty in which Ph.D was awarded:	Science & Humanities (Mathematics)
7. Area of Specialization in Ph.D:	Space Time Coding & Its Applications, Fluid Dynamics
8. Year of Ph.D Completion:	October 2013
9. Year of got Supervisor Recognition:	February 2017



SRIRAMAKRISHNA INSTITUTE OF TECHNOLOGY
(An Autonomous Institution)

10. List of Journals papers published:

Sl. No.	Author's	Title of the Paper	Name of the Journal	URL of the Journal Home Page	Volume, Issue no & Year of Publication	ISSN No.	DOI No.
1	M. Kasiselvanathan, S. Nagarani, P. Ramya, Manikandan Rajagopal	Enhanced chicken swarm optimization for channel estimation and low complexity hybrid beamforming over massive MIMO	Journal of Autonomous Intelligence	https://jai.front-sci.com/index.php/jai/article/view/1596	Volume 7 Issue 5, Year 2024, Pages 1-16	2630-5046(online)	https://doi.org/10.32629/jai.v7i5.1596
2	Dr. Sharath Kumar D.R.V.A, Dr.S.Nagarani, etal,	Advancements in Hardware-Enabled Cyber-Physical Systems: A Comprehensive Exploration in Electronics and Computer Science	International Journal on Recent and Innovation Trends in Computing and Communication	https://ijritcc.org/index.php/ijritcc/article/view/10188	Volume 11, Year 2023, Pages 10s	2321-8169	https://ijritcc.org/index.php/ijritcc/article/view/10188
3	L.Maragatham, Dr.S.Nagarani etal,	Mathematical analysis of nonlinear reaction-diffusion	Mathematics in Engineering,	http://nonlinearstudies.com/index.php/mesa/article/view/3350	Volume 14, Year 2023, Pages 835	2041-3165	http://nonlinearstudies.com/index.php/mesa/



SRIRAMAKRISHNA INSTITUTE OF TECHNOLOGY
(An Autonomous Institution)

		processes in immobilized glucoamylase kinetic in flow calorimetric at all electrodes using asymptotic method	Science and Aerospace				article/view/3350
4	Dr.A.Vanitha Katharine , Dr.S.Nagarani, K.Sampathkumar, Dr.L.Anitha, C.Rajasekar	Identification Of Sentimental Analysis In Social Media Content Using Machine Learning	Neuro Quantology	https://www.neuroquantology.com/open-access/IDENTIFICATION+OF+SENTIMENTAL+ANALYSIS+IN+SOCIAL+MEDIA+CONTENT+USING+MACHINE+LEARNING_9016/	vol 20, issue15, page 5839-5844, Nov. 2022	eISSN 1303- 5150	DOI: 10.14704/N Q.2022.20. 15.NQ8858 8
5	S. Lavanya, S. Nagarani	Leader-following consensus of multi-agent systems with sampled-data control and looped functionals	Mathematics and Computers in Simulation	https://www.sciencedirect.com/journal/mathematics-and-computers-in-simulation	Volume 191, Year 2022, Pages 120– 133	037847 54	DOI: 10.1016/j. matcom.20 21.08.002
6	M. Vijaya kumar, S. Nagarani, C. Pradeep, R. Prabakaran	Robust synchronization of uncertain Markovian jumping complex	European Journal of Control	https://www.sciencedirect.com/journal/european-journal-of-control	Volume 63, Year 2022, Pages 14-27	0947- 3580	10.1016/j.ejcon.2021.07.003



SRIRAMAKRISHNA INSTITUTE OF TECHNOLOGY
(An Autonomous Institution)

		interconnected neural networks via adaptive fault-tolerant control					
7	P.Geetha, S. Nagarani	Novel Model for Automatic Classification of the Epileptic Seizures Using Fast Fourier Series-Haar Wavelet Transform	Journal of Medical Imaging and Health Informatics	https://www.ingentaconnect.com/content/asp/jmihi	Vol.11,3209-3214, 2021	2156-7018	10.1166/jmihi.2021.3918
8	P.Geetha, S. Nagarani	An Efficient Image Segmentation Using Partial Differential Equation for Image Processing Applications	Journal of Medical Imaging and Health Informatics	https://www.ingentaconnect.com/content/asp/jmihi	Vol.11,2538-2545,2021	2156-7018	10.1166/jmihi.2021.3840
9	A.Sekar , S.Nagarani	A Fuzzy Approach To Predict The Thermal Performance Of Spiral Solar Thermal Collector	Turkish Journal of Computer and Mathematics Education	https://turcomat.org/index.php/turkbilmomat/article/view/1283	Vol 12 , Iss. 6,2021	1309-4653	https://turcomat.org/index.php/turkbilmomat/article/view/1283
10	Immanual Rajkumar, B Paul Vinofer , Nagarani S , B	Thermal Performance Investigation of	International Journal of Advanced	http://serisc.org/journals/index.php/IJAST/article/view/24360	Vol.12 no.6,2021	2005-4238	http://serisc.org/journals/index.php/IJAST/artic



SRIRAMAKRISHNA INSTITUTE OF TECHNOLOGY
(An Autonomous Institution)

	Chokkalingam , V. Raja, Dhineshkumar	Spiral Collector using CFD,	Science and Technology				le/view/24360
11	S.Kalyani, Dr.S.Nagarani	A fully fuzzy transportation problem with hexagonal fuzzy number	AIP Conference Proceedings	https://pubs.aip.org/aip/acp/article-abstract/2261/1/030078/1026033/A-fully-fuzzy-transportation-problem-with	Volume 2261, Year 2020, Pages 030078	1551-7616	https://doi.org/10.1063/5.0016903
12	S Lavanya, S Nagarani C Pradeep,	Projective synchronization of fractional-order chaotic energy resource systems via linear control based on Takagi-Sugeno fuzzy model	AIP Conference Proceedings	https://pubs.aip.org/aip/acp/article-abstract/2261/1/030127/1026172/Projective-synchronization-of-fractional-order?redirectedFrom=fulltext	Volume 2261, Year 2020, Pages 030127	ISSN 1551-7616	https://doi.org/10.1063/5.0017268
13	S. Anne Susan, S.P. Anjali Devi, S. Nagarani	Unsteady Hydromagnetic Flow and Radiation Heat Transfer Past a Stretching Surface Embedded in a Porous Medium with Dissipation Effects	Materials Science and Engineering	https://iopscience.iop.org/article/10.1088/1757-899X/932/1/012126	Volume 932, 2020	1757-899X	DOI 10.1088/1757-899X/932/1/012126
14	P.Geetha, S. Nagarani	Influence of Heat Generation and Radiation on Heat	Caribbean Journal of Science	https://www.researchgate.net/publication/381583548_Infl	Vol 53, Iss. 2,2019	0008-6452	



SRIRAMAKRISHNA INSTITUTE OF TECHNOLOGY
(An Autonomous Institution)

		and Mass Transfer in Porous Medium		uence_of_Heat_Generation_and_Radiation_on_Heat_and_Mass_Transfer_in_Porous_Medium			
15	Suresh A, Malathi P, Nagarani S, Oswalt Manoj S	An improved cellular automata based image denoising method for biometric applications	Biomedical Research	https://www.alliedacademies.org/abstract/an-improved-cellular-automata-based-image-denoising-method-for-biometric-applications-7032.html	Volume 8, Year 2018, Pages S31-S39	0970-938X	10.4066/biomedicalresearch.29-16-2321
16	AP Roger Rozario, S Pravinth Raja, S Arjuman Banu, S Nagarani	A Watchdog For Indigenous Cattle Breeds To Increase Milk Yield in Indian Dairy Farms	International Journal of Pure and Applied Mathematics	https://www.researchgate.net/publication/328600633_A_Watchdog_For_Indigenous_Cattle_Breeds_To_Increase_Milk_Yield_in_Indian_Dairy_Farms	Volume 120, Year 2018, Pages 165-178	1314-3395	
17	Pravinthraja , Roger Rozario.A. , Nagarani., Kavitha.N S	Intelligent Mushroom Monitoring System	International Journal of Engineering & Technology	https://www.sciencepubco.com/index.php/ijet/article/view/18110	Vol 7, no.2.33 Year 2018	1238-1242	10.14419/ijet.v7i2.33.18110
18	Hariharan K, R.Immanuel, S.Nagarani, S. Kalyani	Smart Agricultural Weed Removal System	International Journal of Pure and Applied Mathematics	https://www.researchgate.net/publication/328600380_Smart_Agricultural_W	Volume 120, Year 2018	1314-3395	



SRIRAMAKRISHNA INSTITUTE OF TECHNOLOGY
(An Autonomous Institution)

				eed Removal System			
19	SP Abhishek Udiit, S Nagarani, A Hariharan	CATENARY CURVES–A CASE STUDY	International Journal of Management , Technology And Engineering	https://www.researchgate.net/publication/329801885_catenary_curves_a_case_study	Year 2018, Pages 644-649	2249-7455	
20	Ramkumar.E, Nagarani.S	Tomen:A Plant monitoring and smart gardening system using IoT	International Journal of Pure and Applied Mathematics	https://acadpubl.eu/jsi/2018-119-7/articles/7a/73.pdf	Volume 119 Issue 7 Pages 703-710, Year 2018	314-3395	
21	S.Kalyani, S.Nagarani, Devendra kumar, Maragatham.L	An intelligent reliable signal transmission by optimal allocation of resources in OFDMA for E-Learning educational system	Perspectivas em Ciencia da Informacao	https://www.researchgate.net/publication/322096467_An_intelligent_reliable_signal_transmission_by_optimal_allocation_of_resources_in_OFDMA_for_E-Learning_educational_system	Volume 22, Year 2017, Pages 80-98	1413-9936	
22	Suresh A, Malathi P, Nagarani S, Oswalt Manoj S	An improved cellular automata (ca) based image denoising method for biometric applications	Biomedical Research	https://www.researchgate.net/publication/330041127_An_improved_cellular_automata_ca_based_image_denoising	Special issue 2017	ISSN 0970-938X	10.4066/biomedicalresearch.29-16-2321



SRIRAMAKRISHNA INSTITUTE OF TECHNOLOGY
(An Autonomous Institution)

				g_method_for_bio metric_applications			
23	Kalyani S. Nagarani S. Maragatham L. Devendra Kumar N.	Multi criteria decision making for selecting the best Laptop	International Journal of Control Theory and Applications	https://www.researchgate.net/publication/312027330_Multi-Criteria_Decision_Making_For_Selecting_the_Best_Laptop	Volume 9, (36):437-441 Year 2016	0974- 5572	
24.	Nagarani S.	A Dynamic Subcarrier, Bit and Power Allocation for OFDMA-Based Relay Networks using Swarm Intelligence based Optimized Approaches- A Comparative Analysis	Asian Journal of Information Technology	https://www.researchgate.net/publication/316967488_A_Dynamic_Subcarrier_Bit_and_Power_Allocation_for_OFDMABased_Relay_Networks_using_Swarm_Intelligence_based_Optimized_Approaches-A_Comparative_Analysis	Volume 15, (9):1472-1483 Year 2016	1682- 3915	10.3923/ajit .2016.1472 .1483
25	S Nagarani, S Kalyani, TL Yookesh	A Soft Set Approach for Selecting the best Laptop under Fuzzy Environment	International Journal of Computer & Mathematical Sciences	https://www.researchgate.net/publication/381611302_A_Soft_Set_Approach_for_Selecting_the_best_Laptop_under_Fuzzy_Environment	Volume 6, Issue 2 February 2017	2347 – 8527	



SRIRAMAKRISHNA INSTITUTE OF TECHNOLOGY
(An Autonomous Institution)

26	Kirubha. Ma, S. Oswalt Manojb, Dr. S. Nagaranic	A Novel Approach for Search Engine using Algorithms	International Journal of Innovations & Advancemen t in Computer Science	https://www.researchgate.net/publication/381611309_A_Novel_Approach_for_Search_Engine_using_Algorithms	Volume 5, Issue 6 June 2016	2347 – 8616	
27	Kalyani S, Maragatham L Nagarani S	An Algorithm for Linear Fuzzy Fractional Transportation Problem	International Journal of Engineering Technology, Management and Applied Sciences	https://www.researchgate.net/publication/346561434_An_Algorithm_for_Linear_Fuzzy_Fractional_Transportation_Problem	Volume 4, (10)Year 2016	2349- 4476	
28	S. Nagarani, J. Mala and M. Kiruba	An Enhanced Resource Allocation Scheme for MIMO-OFDMA Wireless Network to Support Multiple Users with Reduced Interference Rate	International Journal of Printing, Packaging & Allied Sciences	https://www.researchgate.net/publication/316967385_An_Enhanced_Resource_Allocation_Scheme_for_MIMO-OFDMA_Wireless_Network_to_Support_Multiple_Users_with_Reduced_Interference_Rate_Published_in	Vol. 4, No. 2, December 2016	2320- 4387	
29	M. Vijaya Kumar, S.Saravanakumar S.Nagarani	Dissipative Analysis For Random Time Varying Delay Sampled-Data Controller Design	International Journal of Advance Research in Science and Engineering	https://www.researchgate.net/publication/381612367_dissipative_analysis_for_random_time_varying_delay_samp	Volume 5, Issue 8 Aug 2016	2319- 8354	



SRIRAMAKRISHNA INSTITUTE OF TECHNOLOGY
(An Autonomous Institution)

		For Singular Networked Cascade Control System		led-data_controller_design_for_singular_networked_cascade_control_system			
30	S.Arjuman Banu S.Nagarani M.Kirubha	Preparation of Low Cost Activated Carbon Adsorbents from Natural Sources	International Journal of Engineering Technology Science and Research	https://www.researchgate.net/publication/304771144_Preparation_of_Low_Cost_Activated_Carbon_Adsorbents_from_Natural_Sources	Volume 3, Issue 4 April 2016	2394 – 3386	
31	S. Nagarani	Intelligence swarm techniques based dynamic subcarrier, bit and power allocation for of DMA-based relay networks	International Journal of Applied Engineering Research	https://www.researchgate.net/publication/316967568_Intelligence_Techniques_Based_Dynamic_Subcarrier_Bit_and_Power_Allocation_for_OFDMA-Based_Relay_Networks	Volume 10, Number 2 (2015) pp. 3187-3208	0973- 4562	
32	S.Nagarani, C.V.Seshaiah	Nature Inspired Metaheuristics Techniques based Dynamic Subcarrier, Bit and Power Allocation for OFDMA-Based Relay Networks	Life Science Journal	https://www.researchgate.net/publication/316967388_Nature_Inspired_Metaheuristics_Techniques_based_Dynamic_Subcarrier_Bit_and_Power_Allocation_for_OFDMA-	Year 2013, Pages 3241- 325	1097- 8135	



SRIRAMAKRISHNA INSTITUTE OF TECHNOLOGY
(An Autonomous Institution)

				Based_Relay_Net works			
33	S.Nagarani, C.V.Seshaiah	A Swarm Intelligence based Dynamic Subcarrier, Bit and Power Allocation for OFDMA-Based Relay Networks	Bonfring International Journal of Networking Technologies and Applications	https://www.researchgate.net/publication/316967644_A_Swarm_Intelligence_based_Dynamic_Subcarrier_Bit_and_Power_Allocation_for_OFDMA-Based_Relay_Networks	Volume 1, Year 2012, Pages 20-26	2279- 0152	10.9756/BI JNTA.1005 5
34	S.Nagarani, C.V.Seshaiah	"An Improved Artificial Bee Colony Optimization based Dynamic Subcarrier, Bit and Power Allocation for OFDMA-Based Relay Networks	Archives des Sciences	https://www.researchgate.net/publication/316967573_An_Improved_Artificial_Bee_Colony_Optimization_based_Dynamic_Subcarrier_Bit_and_Power_Allocation_for_OFDMA-Based_Relay_Networks	Vol 65, No. 9; Sep 2012	1661- 464X	



SRIRAMAKRISHNA INSTITUTE OF TECHNOLOGY
(An Autonomous Institution)

35	S.Nagarani, C.V.Seshaiah	Artificial bee colony optimization based dynamic resource allocation for OFDMA-based relay networks	International Journal of Soft Computing	https://www.researchgate.net/publication/316967641_Artificial_Bee_Colony_Optimization_Based_Dynamic_Resource_Allocation_for_OFDMA-Based_Relay_Networks	Volume 7 (6), 271-280, Year 2012	1816-9503	10.3923/ijsc.2012.271.280
36	C.V.Seshaiah S.Nagarani	An Efficient Plotkin-Alamouti Superposition Coding Scheme for Wireless Communications	International Journal of Computer Science and Engineering Systems	https://www.researchgate.net/publication/316967499_An_Efficient_Plotkin-Alamouti_Superposition_Coding_Scheme_for_Wireless_Communications	Volume 6, Year 2012, Pages 1-6	0973-4406	
37	S.Nagarani, C.V.Seshaiah	AN EFFICIENT SPACE-TIME CODING FOR WIRELESS COMMUNICATIONS WITH OFFSET 4 - PHASE SHIFT KEYING	ARPJ Journal of Engineering and Applied Sciences	https://www.researchgate.net/publication/316967397_An_Efficient_Space-Time_Coding_For_Wireless_Communications_With_Offset_4_-_Phase_Shift_Keying	VOL. 6, NO. 12, DECEMBER 2011	1819-6608	



SRIRAMAKRISHNA INSTITUTE OF TECHNOLOGY
(An Autonomous Institution)

38	S.Nagarani, C.V.Seshaiah	An Efficient Space-Time Coding for Wireless Communications	European Journal of Scientific Research	https://www.researchgate.net/publication/301215093_An_Efficient_Space-Time_Coding_for_Wireless_Communications_European_Journal_of_Scientific_Research_2011_52_2_195-203	Vol.52 ((2)), 2011,195-203	1450- 216X	
39	S.Nagarani, C.V.Seshaiah	Dynamic Subcarrier, Bit and Power Allocation inOFDMA-Based Relay Networks through EfficientOptimizati on Approach	European Journal of Scientific Research	https://www.researchgate.net/publication/316967643_Dynamic_Subcarrier_Bit_and_Power_Allocation_in_OFDMA-Based_Relay_Networks_through_Efficient_Optimization_Approach	Vol.82 No.3 (2012), pp.354-365	1450- 216X	
40	Dr.S.Nagarani, C.V.Seshaiah	A survey on space-time turbo codes	International Journal Computer Science and Information Security	https://www.researchgate.net/publication/316967646_A_Survey_on_Space-Time_Turbo_Codes	Volume 7, Year 2010, Pages 171- 177	1947- 5500	



SRIRAMAKRISHNA INSTITUTE OF TECHNOLOGY
(An Autonomous Institution)

11. Ph.D Research Scholars Details:

Sl.No	Reg. No	Name	Faculty	Reg. Year	Present Status	If completed, Year of Completion	Title of Thesis	No. of Journals Published	Thesis Copy*
1.	17147697153	Vijaya Kumar M	Mathematics	JUL 2017	Completed	May 2023	A study on dynamical systems using various controls in the networks	1	Yes
2.	17247697113	Manimegalai M	Mathematics	JUL 2017	Confirmation Completed	-	General Topology	-	-
3.	17247697119	Rajeswari P	Mathematics	JUL 2017	Confirmation Completed	-	General Topology	-	-
4.	17247697200	Lavanya S	Mathematics	JUL 2017	Confirmation Completed	-	Certain Investigation on nonlinear Dynamical Systems	2	-
5.	18147691163	Duraikannan J	Mathematics	JAN 2018	Confirmation Completed	-	General Topology	-	-
6.	18147691181	Gnanakumar M	Mathematics	JAN 2018	Confirmation Completed	-	General Topology	-	-
7.	18247691177	Vallimalar M	Mathematics	JAN 2018	Confirmation Completed	-	General Topology	-	-
8.	19147691119	Senthilkumar K	Mathematics	JAN 2019	Confirmation Completed	-	Differential equation a uniqueness and Controllability	-	-
9.	19247691107	Maragatham L	Mathematics	JAN 2019	Confirmation Completed	-	A study on epidemic model using differential equation.	1	-