

Staff Profile



1. Basic Information

Name :	Dr.A.SENTHILKUMAR
Designation :	ASSISTANT PROFESSOR
Department :	COMPUTER SCIENCE
Institution :	THIRUVALLUVAR GOVERNMENT ARTS COLLEGE,RASIPURAM
Date of Birth :	02.06.1976
Contact No. :	9865117804
Email ID :	asenthilkumar@tgac.ac.in
Address :	4/76 Pudhu Street Kumaramangalam (Post) Tiruchengode(Tk) Namakkal (DT) 637205

2. Educational Details

UG : (Degree, Subject, Institution, Year)	B.Com ,Commerce, Sengunthar Arts And Science College,Tiruchengode, 1996
PG : (Degree, Subject, Institution, Year)	M.C.A, Computer Applications, Sengunthar Arts And Science College, Tiruchengode, 1999
M.Phil : (Subject, Institution, Year)	Computer Science ,Manonmaniam Sundarnar University(Distance), 2003
Ph.D. : (Subject/Title, Institution, Year)	Computer Applications , Anna University Chennai (Part Time), 2012
Other Certifications / Courses : (e.g., MOOCs, Diplomas)	-

3. Teaching Experience

S.No	Institute/ University	Designation	Period		Length of Service YY/MM
			From	To	
1.	Thiruvalluvar Government Arts College,Rasipuram	Assistant Professor	20.06.2023	Till Date	2 Year 9 Months

2.	Arignar Anna Govt Arts College, Namakkal.	Assistant Professor	01.10.2015	19.06.2023	7 years 8 months
3.	Government Arts College, Paramakudi.	Assistant Professor	29.07.2015	30.09.2015	2 months
4.	Sri Vijay Vidhyalaya College of Arts and Science, Dharmapuri.	Assistant Professor	18.06.2014	24.07.2015	1 year 1 month
5.	Sri Kumaram Arts and Science College, Karamadai.	Principal	01.06.2014	17.06.2014	17 days
6.	Sri Kumaram Arts and Science College, Karamadai.	Vice Principal	02.05.2014	31.05.2014	1 month
7	Sengunthar Engineering College, Tiruchengode.	Associate Professor & HOD	01.02.2014	30.04.2014	3 months
8	Sengunthar Engineering College, Tiruchengode.	Assistant Professor	29.05.2006	31.01.2014	7 years 8 months
9	PGP Arts and Science College, Namakkal.	Lecturer	07.08.2002	28.02.2006	3 years 6 months
10	Muthayammal College of Arts and Science, Rasipuram.	Lecturer	26.07.2000	02.05.2002	1 year 9 month

Detailed Affiliation-wise Experience

1. Institution Name – Designation – Period – Courses Taught
2. Institution Name – Designation – Period – Courses Taught

4. Research Experience

Total Research Experience:	14 years
Area of Specialization :	Wireless Sensor Networks
Research Projects Completed / Ongoing :	-

5. Ph.D. Guide Ship

Recognition as Research Guide (University, Year) :	Bharathiar University Coimbatore ,Periyar University Salem.
No. of Ph.D. Scholars Guided (Completed) :	11
No. of M.Phil Scholars Guided (Completed) :	-
Ongoing Scholars :	02

Ph.D. Thesis Supervised / Guided

S.No.	Name of the Student	Title of the thesis	Month and Year of Award	Name of the University
1.	N.Vijayarani	Design and Development of a New Effective Space Efficient Secret Sharing Security Algorithm for Wireless Sensor Networks.	December 2019	Bharathiar University,Coimbatore
2.	M.Uma	Development of Energy Consumption Secure, Data Transmission Algorithm in Wireless Sensor Networks.	December 2019	Bharathiar University,Coimbatore
3.	N.V.Chinnasamy	Secured and Efficient Distributed Routing Scheme For Wireless Sensor Networks.	October 2021	Periyar University,Salem
4.	V.Vijayalakshmi	Novel Deep Learning Based Multipath Clustering Protocol For Efficient Data Transmission in Wireless Sensor Networks.	May 2022	Periyar University,Salem
5.	P.Brindha	Efficient Bi-Modal Cryptosystem Based Routing in Wireless Sensor Networks.	November 2022	Periyar University,Salem
6.	J.Kolangiappan	A Novel Threshold Based Detection Mechanism to Cure Jamming Attacks from the Wireless Sensor Networks.	August 2023	Periyar University,Salem
7.	S.Boopathi	Extensible Efficient Route Discovery Protocol for Reliable Data Transmission in Wireless Sensor Networks.	July 2023	Periyar University,Salem

8.	M.Malathi	A Reliable and Secure Framework to Detect and Isolate Different Jamming Attacks from the Wireless Sensor Networks.	December 2023	Periyar University,Salem
9.	C.Sasikala	Secure Data Transmission for Wireless Sensor Network using Trust Mechanism, Attacker Node Finding and Cryptography Technique.	July 023	Bharathiar University,Coimbatore
10.	S.Gayathri	Congestion Aware Secure Data Transmission for Wireless Sensor Networks.	July 2023	Bharathiar University,Coimbatore
11.	R.Gopalakrishnan	Unified Energy Efficient Framework Towards Multiple Mobile Sink Routing Protocol for Wireless Sensor Networks.	January 2025	Periyar University,Salem

6. Publications

Research Articles Published	
National Journals :	
International Journals :	
Books Published / Authored :	

Research Papers published in International Journals

1. Secured Distributed Routing Technique Using Extended DART and Table Elimination (ET-DART) Technique in Wireless Sensor Networks Environment. International journal of Super Computing, Volume , Issues , 2019.
2. USCDRP:Unequal Secure Cluster-Based Distributed Routing Protocol for Wireless Sensor Networks. International journal of Super Computing, Volume 76 , 2019,pp 989-1004.
3. Data Dependability Bimodal Encryption Scheme for Distributed Routing in Wireless Sensor Networks. International journal of Super Computing, 2019.
- 4.Secured Rough Fruit Fly Algorithm for Data Transmission in Wireless Sensor Networks. International Journal of Control Theory and Applications, Volume 10, Issues 33, 2017,pp0974-5572.
5. Enhanced Security in Data Transmission in Wireless Sensor Network Using Randomized Path. International Journal of Engineering and Computer Science, Volume 5, Issues 1, 2016 pp15421-15427.
- 6.Reliable Data Deliver in Wireless Sensor Networks. International Journal of Applied Engineering Research, Volume 10, Issues 21, 2015,pp 20273-20278.

7. Study on Coverage Problems in Wireless Sensor Networks. International Journal of Contemporary Research in Computer Science and Technology(IJCRCT), Volume 2, Issues 10, October 2016, pp.1046-1051.
8. Energy Efficient Secure Multipath Routing Protocols in Wireless Sensor Networks” International Journal of Engineering Research & Technology (IJERT), Volume No.2, Issues No.4, April 2013, pp.1483-1488.
9. Secure Multipath Routing Protocols in Wireless Sensor Networks: A Survey Analysis International Journal of Computer Science and Information Technology & Security (IJCSITS) Volume No.3, Issues No.1, February 2013, pp.101-107.
10. Multiple Data-Paths Routing of Probabilistic Approach towards Secure Routing in Wireless Sensor Networks. European Journal on Scientific Research, Volume No. 47, Issues No.4, December 2010, pp.618-631.
11. Secure Routing in Wireless Sensor Networks: Routing Protocols, International Journal on Computer Science and Engineering, Volume No. 2, Issue No.4, July 2010, pp. 1266-1270.
12. Secure Routing in Wireless Sensor Networks. International Journal on Computer Science and Engineering, Volume No. 2, Issue No.3, May 2010, pp. 645-655.
13. Secure Routing in Wireless Sensor Networks: Multiple Base Stations, International Journals of Power, Control Signal and Computations Volume No. 1, Issue No.2, April – June 2010, pp.119-123.
14. "Multiple Data-Paths Routing of Probabilistic Approach towards Secure Routing in Wireless Sensor Networks", European Journal on Scientific Research, International Journal, Volume No. 47, Issues No.4, December 2010, pp.618- 631.
15. "Secure Routing in Wireless Sensor Networks: Multiple Base Stations". International Journals of Power, Control Signal and Computations, International Journal, Volume No. 1, Issue No.2, April-June 2010, pp.119-123.
16. "Secure Routing in Wireless Sensor Networks: Routing Protocols", International Journal on Computer Science and Engineering, International Journal, Volume No. 2, Issue No.4, July 2010, pp. 1266-1270.
17. N.V. Chinnasamy and Dr.A.Senthilkumar , “Secure and Efficient Data Transmission in Wireless Sensor Network Using Augmented Tree-Based Routing Protocol”, International Research Journal of Mathematical Science, ISSN:2278-8697, Volume-V, Issue-II, Dec- 2016.
18. N.V. Chinnasamy and Dr.A.Senthilkumar “Secured Distributed Routing Techniques using Extended DART and Table Elimination (ET-DART) Techniques in Wireless Sensor Network Environment”, The Journal of Supercomputing (Springer) pp.915-931, Oct-2019.
19. N.V. Chinnasamy and Dr.A.Senthilkumar “Fault Avoidance Queue based Load Balancing Protocol (FAQ-LB) for Multipath Routing in Wireless Sensor Networks”, International Journal of Advanced Science and Technology Vol. 29, No. 7, (2020), pp. 8987-8999.
20. N.V. Chinnasamy and Dr.A.Senthilkumar “Secured Multipath Routing Technique using Extended DART and Table Elimination (ET-DART) Technique in Wireless Sensor Networks”, The Journal of Supercomputing Springer Journal of Advanced Science and Technology Vol. 29, No. 7, (2020), pp. 8987-8999.
21. P.Brindha and Dr.A.Senthilkumar, “A Survey on Energy Conservation Techniques in Wireless Sensor Networks”, International Journal of Trend in Research and Development ISSN 2394 -9333, Volume 3 Issue 6, November –December 2016.
22. P.Brindha and Dr.A.Senthilkumar, “Data dependability based bimodal encryption scheme for distributed routing in wireless sensor networks”, Peer to Peer Networking and Applications ISSN 1936 – 6450 , Volume 13, Number 4 , December 2019.
23. P.Brindha and Dr.A.Senthilkumar, “Contemporary Secure Mechanism Using Deep Belief Network (DBN) For Smart Environment in Wireless Sensor Networks”, Turkish Journal of Computer and Mathematics Education , Volume 12, No 11, ISSN 4435 – 4441, May 2021.

- 24.N.Vijayarani, Dr.A.Senthilkumar, "Reliable data deliver in Wireless Sensor Networks", International Journal of Applied and Engineering Research (IJAER), Volume 10, Issue 2,ISSN 0973-4562, pp.20273-20278.(Indexed in Scopus, Google Scholar).
- 25.N.Vijayarani, Dr.A.Senthilkumar, "Study on Coverage Problems in Wireless Sensor Networks", International Journal of Contemporary Research in Computer Science and Technology (IJCRCST), Volume 2, Issue 10, pp.1046-1051,October 2016.
26. N.Vijayarani, Dr.A.Senthilkumar, "Consequence of Space Efficient Secret Sharing in Wireless Sensor Networks", Indian Journal of Science and Technology, Volume 10,Issue10, pp.1-7,March 2017.(indexed in Scopus, Thomson Reuters,ISI)
- 27.N.Vijayarani, Dr.A.Senthilkumar, "Wireless Multipath Routing Protocols: A Retrospective Survey", Indian Journal of Science and Technology", Volume 10,Issue17, pp.1-9, May 2017.(indexed in Scopus, Thomson Reuters,ISI)
- 28.C.Sasikala, Dr. A. Senthilkumar "Secure disjoined multi-hop communication in wireless sensor network using trust nodes based data transmission technique" pp(1-8), Elsevier-2021.
- 29.C.Sasikala, Dr.A. Senthilkumar "Performance Impact of Node Capture in Black Hole Attacks using Fruit Fly Optimization(FFO) Algorithm for Multipath Routing in Wireless Sensor Network" Journal of Information and Computational Science (IJCS),UGC Care, Vol.11(9), pp(605- 627)2021.
- 30.C.Sasikala, Dr.A.Senthilkumar "MBECDH: Hybrid Cryptography Algorithm based Secure Data Communication Process in Wireless Sensor Network" The International Journal of Analytical and Experimental modal Analysis (IJAEMA), UGC Care, Vol.8 (7), pp (66-78), 2021.
31. C.Sasikala, Dr.A.Senthilkumar "A Novel Framework using Stochastic Gradient Decent Search for Optimizing Wireless Sensor Networks " TurkishOnline Journal of Qualitative Inquiry(TOJQI), Vol.12, Issue 9, August 2021:3333 - 3341.
- 32.C.Sasikala, Dr.A.Senthilkumar "Adaptive Security in Wireless Sensor Network" International Journal of Engineering and Science Invention (IJESI), UGC Approved Journal, Vol.5, pp (36-38),Jan 2018.
- 33.S.Gayathri and Dr.A.Senthilkumar "Energy Efficient Multi-Hop Path Data Communication Process in Wireless Sensor Networks Using Routing Technique" International Journal of Design Engineering (IJDE), Scopus Indexed Journal, Vol.6, pp(3235-3251), 2021.
- 34.S.Gayathri and Dr.A.Senthilkumar "The Comparison of Cluster Based Data Collectionin Wireless Sensor Network using Various Optimization Techniques" Journal ofInformation and Computational Science (IJCS), UGC Care, Vol.11 (8), pp(404-412),August-2021.
- 35.S.Gayathri and Dr.A. Senthilkumar "Congestion Aware Data Communication Processusing Data Optimization with Routing Technique in Wireless Sensor Network" TheInternational Journal of Analytical and Experimental model Analysis (IJAEMA), UGC Care, Vol.13(9), pp(748- 767), September 2021.
36. S.Gayathri and Dr.A.Senthilkumar "Energy Efficient Based Secure Data Transmission for Multi-Hop Trust Management Technique using Wireless Sensor Network" The ICTACT Journal of Communication Technology, Vol.12 (4), pp(2582-2589), December 2021.
37. S.Gayathri and Dr.A.Senthilkumar "A Novel Framework for Prevention of Black Hole in Wireless Sensor Networks using Deep Belief Network" Turkish Online Journal of Qualitative Inquiry (TOJQI), Scopus Indexed journal, Vol.12(7), pp(5243 - 5250), July 2021.
- 38.Kolangiappan J., Senthil Kumar A. A novel framework for the prevention of black-hole in wireless sensors using hybrid convolution network. Scientific and Technical Journal of Information Technologies, Mechanics and Optics, 2022, vol. 22, no. 2, pp. 317–323. doi: 10.17586/2226-1494-2022-22-2-317-323. (Scopus Indexed)
- 39.Kolangiappan J., Senthil Kumar A. A multi-path secure routing for the detection of node capturing attack in wireless sensor network. Scientific and Technical Journal of Information Technologies, Mechanics and Optics, 2022, vol. 22, no. 6, pp. 1127–1135. doi: 10.17586/2226-1494-2022-22-6-1127-1135. (Scopus Indexed)

40. Kolangiappan J., Senthil Kumar A. A Novel framework using stochastic gradient decent search for optimizing wireless sensor networks. International journal of humanities, law and social sciences, 2022, vol. 71, no.2.
41. M Uma and Dr. A Senthilkumar "Secure Rough Fruit Fly Algorithm for Data Transmission International Journal of Control Theory and Application ISSN: 0974-5572 Page no 79. 91 Vo.No. 10 Number 33 2017
42. M Uma and Dr. A Senthilkumar Enhanced Security in Data Transmission in Wireless Sensor Network Using Randomized Path" International Journal of Engineering and Computer Science ISSN No: 2319-7242 Page No: 15421- 15427, Vo. No. 5, Issue 1, 2016
43. Malathi Mani, Senthil Kumar Angamuthu, "Quasi-oppositional spider monkey optimization based model in wireless sensor networks", International Journal of Safety and Security Engineering, Vol.12, No. 5, October 2022 pp. 553- 561, ISSN:2041-9031 <https://doi.org/10.18280/ijssc.120502> (Scopus indexed)
44. M. Malathi and Dr. A. Senthilkumar. "A Distributed Fault Aware Routing Protocol towards Eliminating Sink Hole and Worm Hole Attacks in wireless sensor networks", Journal of Emerging Technologies And Innovative Research (JETIR) An International Scholarly Open Access, Peer reviewed, Refereed Journal ISSN 2349-5162, Volume 10, Issue 2, February 2023.
45. Malathi M., Senthil Kumar A. "A trusted based countermeasure (TBC) to detect and isolate malicious nodes from the wireless sensor networks. (Accepted). Scientific and Technical journal of Information technologies, Mechanics and Optics. ITMO University, Russia. (Scopus Indexed)
46. V. Vijayalakshmi and Dr. A. Senthilkumar, "A Survey On Cluster based Multipath Routing Protocol for Wireless Sensor Networks", International Journal of Trend in Research and Development ISSN 2394 -9333, Volume 3 Issue 6, November December 2016.
47. V. Vijayalakshmi and Dr. A. Senthilkumar, "USCDRP: Unequal Secure Cluster based Distributed Routing Protocols for Wireless Sensor Network, The Journal of Super Computing (Springer) ISSN 0920-8542, Volume 76, Number 2, November 2019.
48. V. Vijayalakshmi and Dr. A. Senthilkumar, "An Efficient Stochastic Gradient Diffusion Search for WSN using Parallel Computing Technique ", Turkish Journal of Computer and Mathematics Education, Volume 12, No 11, ISSN 4423-4428, May 2021.
49. S. Boopathi and Dr. A. Senthilkumar, "Wireless Sensing Based Trust Aware Path Discovery Protocol" Published Stochastic Modeling & Application, Vol-6 No:3. ISSN 0972-3641- May 2022.
50. S. Boopathi and Dr. A. Senthilkumar, "Reliable Energy Aware Routing Protocol (REARP) in Secure Routing Protocol for Wireless Sensor Network" Published in Journal of Engineering Science (JES), Volume 11, Issue 03-March-2020.
51. S. Boopathi and Dr. A. Senthilkumar, "Scalable and Dynamic Routing Protocol for Efficient Route Discovery in Wireless Sensor Network". Published in International Journal of Advanced Research in Engineering and Technology (JAARET), Volume 11, Issue 11- Nov 2020.
52. R. Gopalakrishnan and Dr. A. Senthilkumar, INDUSTRIAL ENGINEERING JOURNAL UGC care list. (ISSN: 09702555)-volume 15 October 2022, Multiple Mobile Sink Scheduling in Energy Efficient Cluster based Wireless Sensor Network using Artificial Neural Network.
53. R. Gopalakrishnan and Dr. A. Senthilkumar, JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR) PEER REVIEWED REFEREED JOURNAL (ISSN: 23495162)-volume 10 February 2023, Redundancy resilient mobile sink scheduling protocol for cluster based wireless sensor network.

54.R.Gopalakrishnan and Dr.A.Senthilkumar, SCIENTIFIC AND TECHNICAL JOURNAL OF INFORMATION TECHNOLOGIES, MECHANICS AND OPTICS (ITMO) SCOPUS Vol. 24 No 1 ISSN 2500-0373 (online), A novel strategic trajectory-based protocol for enhancing efficiency in wireless sensor networks.

7. Research Metrics

Citations :	-
h-index :	-
i10-index :	-
Google Scholar Link:	https://scholar.google.com/citations?view_op=new_articles&hl=en&imq=senthil+kumar#

8. Conferences / Seminars / Workshops

Conferences Attended (National / International) :	-
Seminars Attended :	-
FDPs / Refresher Courses Attended :	1.UGC sponsored Orientation programme from 17.11.2017 to 14.12.2017 conducted by UGC-HRDC, Bharathiar University, Coimbatore, Tamil Nadu. 2.UGC sponsored Refresher programme from 13.02.2019 to 05.03.2019 conducted by UGC-HRDC, Bharathiar University, Coimbatore, Tamil Nadu. 3.UGC sponsored Online Refresher Course from 22.09.2021 to 05.10.2021 conducted by UGC-HRDC, Bharathidasan University, Tiruchirapalli, Tamil Nadu. 4.UGC sponsored Online Refresher Course from 13.03.2023 to 27.03.2023 conducted by Teaching Learning Centre and Department of Computer Science, Ramanujan College, University of Delhi under the aegis of MINISTRY OF EDUCATION PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS ANDTEACHING .
Workshops Attended :	-
Papers Presented :	-
Conferences Organized (National / International) :	-
Seminars Organized :	-
Workshops Organized:	

9. Invited Talks

Number of Talks Delivered :	-
Key Institutions / Programs :	-

10. Extension and Co-Curricular Activities

NSS / NCC / YRC Involvement :	NSS Coordinator Unit – III July 2023 to Till Date
Clubs (Eco Club, Literary Club, etc.) :	-
Community Outreach / Social Service :	-
Industrial Visit :	-

11. Administrative Positions / Other Responsibilities

Head of the Department :	-
IQAC / NAAC / UGC Coordinator :	-
Examination Committee / Admission Committee :	-
Other Administrative Roles :	-

12. Awards & Recognitions

Awards Received :	-
Fellowships :	-
Grants / Scholarships :	-
Any Other Distinction :	-

13. Additional Details

Membership in Professional Bodies (e.g., ISTE, IEEE, ISCA, etc.) :	-
Reviewer / Editorial Board Member :	-
Patents Filed / Granted :	-
Online Courses Designed / E-Content Developed :	-
Any Other Contributions :	-