Staff Name	:	Dr. J. Martin Leo Manickam		
Faculty ID	:	TEC12		
Designation	:	Professor		
Qualification	:	B.E., M.E., Ph.D.,		
Teaching Experience	:	27 years 5 months		
	:	Wireless and Mobile Networks Optical Communication		
Subjects Expertise	:	 Digital communication Computer networks Communication theory Multimedia compression and communication Optical communication Wireless sensor networks Wireless communication 		
Books Published Journals published	·	 Ramalingam, A., George, S.V., Srivastava, V., Swarnalatha A, and Martin Leo Manickam J, 2024, Semantic Segmentation-Based Building Extraction in Urban Area Using Memory-Efficient Residual Dilated Convolutional Network, Arabian Journal of Science and Engineering, https://doi.org/10.1007/s13369-023-08593-z. (IF: 2.9) Anitha G, Martin Leo Manickam J, and Surapaneni_Krishna Mohan, 2024, Enhanced stacking ensemble Model: A statistical ensemble pruning framework to classify anxiety severity for responsive emergency preparedness, Biomedical Signal Processing and Control, Vol. 87, Part A, 105523 (IF: 5.1) Devipriya S., & Martin Leo Manickam J., 2023, Outage Performance and Ergodic capacity of User Pairing in Dowmlink MIMO-NOMA systems with Imperfect SIC over 		

- Nakagami m Fading channels, IETE Journal of Research, DOI: <u>10.1080/03772063.2023.2217154</u> (**IF: 1.5**)
- 4. Jasmine Mystica, K., & Martin Leo Manickam, J., 2023, Joint Power and Temperature Aware Routing for implant wireless body area networks, International Journal of communication systems, 36(7), https://doi.org/10.1002/dac.5449 (IF: 2.1)
- 5. Devipriya S., Martin Leo Manickam J. & Victoria Jancee B, 2023, Energy-efficient semi-supervised learning framework for subchannel allocation in non-orthogonal multiple access systems, ETRI Journal, Vol. 3, Issue 11, https://doi.org/10.4218/etrij.2022-0251 (IF: 1.4)
- 6. Devipriya, S., Martin Leo Manickam, J. & Anita, X., 2022, On the outage performance of decode-and-forward based relay ordering in cognitive wireless sensor networks, Wireless networks, pp. 1-13. (IF: 3)
- 7. Tephillah, S., and Martin Leo Manickam, J., 2021, Identification of Malicious User to Combat SSDF Using Trust Based Machine Learning Techniques in Cognitive Radio Networks, International Journal of Future Generation Communication and Networking, ISSN: 2233-7857, Vol. 14, No. 1, pp. 426–434.
- 8. Regan, R and Martin Leo Manickam, J., 2021, An optimal strategy to countermeasure the impersonation attack in wireless mesh network, International Journal of Information Technology, Vol. 13, pp.1033–1038. https://doi.org/10.1007/s41870-021-00680-4.
- 9. Karthikeyan, MV., and Martin Leo Manickam, J., 2020, An enhanced flower pollination algorithm-based chaff point generation method with hardware implementation in WBAN, International Journal of Communication Systems, Vol. 33 & issue 12. (IF: 2.1)
- 10. Tephillah, S., and Martin Leo Manickam, J, 2020, An SETM Algorithm for Combating SSDF Attack in Cognitive Radio Networks, Wireless Communications and Mobile Computing, Article ID 9047809, https://doi.org/10.1155/2020/9047809. (IF: 2.146)

- 11. Anna Devi, E., and Martin Leo Manickam, J., 2020, Identifying Partitions in Wireless Sensor Network, International Journal of Parallel Programming, Vol 48, issue 2, pp.296-309. (IF: 1.5)
- 12. Gomathi, RM., Martin Leo Manickam, J., Sivasangari, A., and Ajitha, P., 2020, Energy efficient dynamic clustering routing protocol in underwater wireless sensor networks, International Journal of Networking and Virtual Organisations, Vol. 22, issue 4, pp. 415-432.
- 13. Kaliraja Thangamani, Martin Leo Manickam, J and Chellaswamy Chellaiah, 2019, An experimental study on photovoltaic module with optimum power point tracking method, International Transactions on Electrical Energy systems, Vol. 30, Issue. 1, pp.1-26 DOI: 10.1002/2050-7038.12175. (IF:2.3)
- 14. Regan, R., and Martin Leo Manickam, J., 2019, An Optimized Energy Saving Model for Hybrid Security Protocol in WMN, National Academy Science Letters, Vol. 42, Issue 6, pp.489-501. (IF:1.1)
- 15. Muruganandam, D., and Martin Leo Manickam, J., (2019), Detection and Countermeasure of Packet Misrouting in Wireless Adhoc Networks, Sensor Letters, Vol.17, Issue 9, pp.696-700
- 16. Karthikeyan, MV., and Martin Leo Manickam, J., 2019, ECG-Signal Based Secret Key Generation (ESKG) Scheme for WBAN and Hardware Implementation, Wireless Personal Communications, Vol. 106, No. 4, pp. 2037-2052. (IF: 2.2)
- Gomathi, RM., and Martin Leo Manickam, J., 2019, Energy Efficient Static Node Selection in Underwater Acoustic Wireless Sensor Network, Wireless Personal Communications, vol. 107, pp. 709–727. (IF: 2.2)
- Regan, R., and Martin Leo Manickam, J., 2019, An Optimized Energy Saving Model for Hybrid Security Protocol in WMN, National Academy Science Letters, Vol. 42, Issue 6, pp.489-501. (IF:1.1)

- 19. Karthikeyan, MV., and Martin Leo Manickam, J., 2018, Efficient Bio-Signal Feature Based Secure Secret Key Generation Scheme a Simplified Model for Wireless Body Area Network, Journal of Medical Imaging and Health Informatics, Vol.8, No. 5, pp. 863-871.
- 20. Julian, P., Martin Leo Manickam, J., Duraipandian, N., and Vinod Kumar, R., 2019, Energy-Efficient Multihop Cooperative Multiple-Input-Multiple-Output Communications in Wireless Ad Hoc/Sensor Networks, Sensor Letters, Vol. 16, No. 12, pp.944-950.
- 21. Anna Devi, E., and Martin Leo Manickam, J., 2020, Identifying Partitions in Wireless Sensor Network, International Journal of Parallel Programming, vol. 48, issue. 2, pp. 296-309. (IF: 1.5)
- 22. Vijayalakshmi, K., and Martin Leo Manickam, J., 2018, A cluster based mobile data gathering using SDMA and PSO techniques in WSN, cluster computing, vol. 22, issue 5, pp. 12727-12736. (**IF: 4.4**)
- 23. Samuthira Pandi, V., and Martin Leo Manickam, J., 2019, A novel of multi-hop transmission in integrated network of WLAN IEEE 802.11 n and IEEE 802.11 g using Riverbed Modeler 17.5, Cluster computing, vol. 22, issue 5, pp.10679-10686. (IF: 4.4)
- 24. Gomathi, RM., and Martin Leo Manickam, J., 2018, Energy Efficient Shortest Path Routing Protocol for Underwater Acoustic Wireless Sensor Network, Wireless personal communications, vol. 98, issue 1, pp. 843-856 (**IF: 2.2**).
- 25. Sargunavathi, S., and Martin Leo Manickam, J., 2017, Design and Development of CTSR with Direct and Indirect Observations of MANET Applications, Mobile Networks and Applications, vol. 22, issue 4, pp.712-718. (IF:3.8)
- 26. Karthikeyan, MV., and Martin Leo Manickam, J., 2017, A novel fast chaff point generation method using bio-inspired flower pollination algorithm for fuzzy vault systems with

- physiological signal for wireless body area sensor networks, Biomedical research.
- 27. Regan, R., and Martin Leo Manickam, J., 2017, Detecting and Denying Malicious Behavior using Adaptive Learning based Routing Protocol in Wireless Mesh Network, Applied Mathematics & Information Sciences, vol.11, pp. 1155-1162.
- 28. Samuthirapandi, V., and Martin Leo Manickam, J., 2017, QoS Enhancement and Modernizing Load Balancing Algorithm for Integrated Networks 802.11n and 802.11g, International Journal of control theory and applications, Vol. 10, No. 6, pp. 1-9, ISSN: 0974-5572.
- 29. Senthilkumar, C., and Martin Leo Mancikam, J., 2017, PCM: A path-aware clustering mechanism for energy-efficient routing protocol in wireless sensor networks' Journal of Computational and Theoretical Nanoscience, Vol.14, No.11, pp. 5478-5483.
- 30. Senthilkumar, C., and Martin Leo Mancikam, J., 2017, REAS: Residual Energy Aware Angle Based Routing Protocol for Cluster-Based Wireless Sensor Networks', Sensor Letters, Volume 15, Number 7, pp. 597-603.
- 31. Annadevi, E., and Martin Leo Manickam, J., 2017, Distributed Cut Detection Algorithm in Wireless Sensor Networks, Research Journal of pharmaceutical biological and chemical sciences, Vol. 8, Issue 2, pp. 1279-1284.
- 32. Annadevi, E., and Martin Leo Manickam, J., 2017, 'A Light Weight Hop Count Based Link Failure Detection Protocol in Wireless Sensor Networks', International Journal of Pure and Applied Mathematics, Vol. 116 No. 10 2017, 425-433.
- 33. Regan, R., and Martin Leo Manickam, J., 2017, A Survey on Impersonation Attack in Wireless Networks, International Journal of Security and Applications, Vol. 11, Issue 5, pp. 39-48.
- 34. Karthikeyan, MV., and Martin Leo Manickam, J., 2017, A 128-bit secret key generation using unique ECG bio-signal for medical data cryptography in lightweight wireless body area networks Pakistan Journal of Biotechnology, Vol.14, issue 2, pp. 257-264.

- 35. Sivagami, L., and Martin Leo Manickam, J., 2016, 'Cluster-Based MAC Protocol for Collision Avoidance and TDMA Scheduling in Underwater Wireless Sensor Networks', The Computer Journal, vol. 59, issue 10, pp.1527-1535. (IF: 1.4)
- 36. Punitha, A., and Martin Leo Manickam, J., 2016, 'Privacy preservation and authentication on secure geographical routing in VANET', Journal of Experimental & Theoretical Artificial Intelligence, vol.29, issue 3, pp.617-628, doi: 10.1080/0952813X.2016.1212103. (IF: 2.2)
- 37. Sargunavathi, S., and Martin Leo Manickam, J., 2016, Trust Based Routing Methods to Pacify Network Layer Attacks in Mobile Ad-Hoc Networks–Survey, International Journal of Control Theory and Applications, Vol. 9, Issue 12, 2016, pp. 5703-5709.
- 38. Sargunavathi, S., and Martin Leo Manickam, J., 2016, TCOR-Energy Efficient and Power Saving Routing Architecture for Mobile ad hoc Networks, International Journal of Computer Science and Information Security (IJCSIS), Vol. 14, pp. 43-52, ISSN 1947-5500.
- 39. Thilakavathi P and Martin Leo Manickam, J., 2016, RSSI based Tree Climbing mechanism for dynamic path planning in WSN', International Journal of Computer Science and Information Security (IJCSIS), Vol. 14, pp. 43-52, ISSN 1947-5500, pp. 44-48
- 40. Gomathi, R.M, Martin Leo Manickam, J., and Nagamani, K., 2016, 'Branching based underwater clustering protocol', Indian Journal of Science and Technology, Vol.9, No.20, issue: 30.
- 41. Punitha, A., and Martin Leo Manickam, J., 2016, Secure group authentication technique for VANET, Asian Journal of Information Technology, Vol.15, No.11, pp. 1637-1644.
- 42. Karthikeyan, MV., and Martin Leo Manickam, J., 2016, Security issues in wireless body area networks: In bio-signal input fuzzy security model: A survey, Research Journal of Pharmaceutical, Biological and Chemical Sciences, Vol. 7 issue 6, pp. 1755-1773.
- 43. Gomathi, R.M., and Martin Leo Manickam, J., 2016, PAPR reduction technique using combined DCT and LDPC based OFDM system for underwater acoustic communication, ARPN

- Journal of Engineering and Applied Sciences, Vol. 11, No. 7, ISSN 1819-6608, pp.4424-4430.
- 44. Gomathi, R.M., and Martin Leo Manickam, J., 2016, A comparative study on routing strategies for underwater acoustic wireless sensor network, Contemporary Engineering Sciences. Vol. 9, No. 2, pp.71-80. ISSN 1314-7641.
- 45. Regan, R., and Martin Leo Manickam, J., 2016, A Survey on Wireless Mesh Networks and its Security Issues, International Journal of Security and Its Applications, 10(3), pp.405-418.
- 46. Anita, X., Bhagyaveni, M.A., and Martin Leo Manickam, J., 2015, 'Colloborative lightweight trust management scheme for Wireless sensor networks', Wireless Personal Communication, Springer doi:10.1007/s11277-014-1998-2, vol. 80, issue 1, pp.117-140 (IF: 2.017)
- 47. Siva Sangari, A., and Martin Leo Manickam, J., 2015, 'Energy efficient and security based data communication in wireless body sensor networks', Journal of Pure and applied microbiology, Vol. 9, pp.701-711.
- 48. Siva Sangari, A., and Martin Leo Manickam, J., 2015, 'Secure Communication over BSN Using Modified Feather Light Weight Block (MFLB) Cipher Encryption', Journal of Software, Vol. 10, No. 6, pp. 730-738, ISSN: 1796-217X. (IF: 1.864)
- 49. Sivagami, L., and Martin Leo Manickam, J., 2015, 'An optimized time synchronization algorithm for mobile submarine sensor networks', International Journal of Control Theory and Applications, Vol.9 No.12, pp. 5727-5731.
- 50. Siva Sangari, A., Martin Leo Manickam, J., and Gomathi, R.M., 2015, 'RC6-based security in wireless body area network', Journal of Theoretical and Applied Information Technology, Vol. 74, No. 1, pp. 31-34.
- Regan, R., and Martin Leo Manickam, J., 2015, 'A Review on Multicast Routing Protocols and its Foremost Security Issues in Mobile Ad-hoc Network', Australian Journal Basic and Applied Science, Vol. 9, Issue 21, pp. 97-108,ISSN: 1682-3915.

- 52. Vijayalakshmi, K., and Martin Leo Manickam, J., 2015, 'Energy-efficient mobile-sink path selection using energy weighted rendezvous planning for WSN', International Journal of Applied Engineering Research, Vol. 10, No.66, pp. 398-403.
- 53. Annadevi, E., and Martin Leo Manickam, J., 2015, 'A novel technique for prolonging the connectivity of wireless sensor networks', International Review on Computers and Software, Volume 10, Issue 2, pp. 222-229.
- 54. Velmurugan, V., and Martin Leo Manickam, J., 2015, 'Efficient and Reliable Broadcast in Vehicular Ad-hoc Networks using EIBP', International Journal of Applied Engineering Research, Vol. 10, No.17, pp. 12741-12746.
- 55. Samuthirapandi, V., and Martin Leo Manickam, J., 2015, 'Survey on Energy Conservation Model for Wireless Multihop Network', International Journal of Applied Engineering Research, Vol. 10, No. 20, pp.17595-17598.
- 56. Anita, X., Bhagyaveni, M.A., and Martin Leo Manickam, J., 2014, "Fuzzy-Based Trust Prediction Model for Routing in WSNs," The Scientific World Journal, vol. 2014, Article ID 480202, 11 pages, 2014. doi:10.1155/2014/480202.
- 57. Siva Sangari, A., and Martin Leo Manickam, J., 2014, 'Security and privacy in wireless body area network', Indian streams research Journal, Vol.4, Issue 8.
- 58. Siva Sangari, A., and Martin Leo Manickam, J., 2014, 'A Light-weight cryptography analysis for wireless based healthcare applications', Journal of Computer Science, Vol. 10, No. 10, pp.2088-2094.
- 59. Punitha, A., and Martin Leo Manickam, J., 2014, 'Location verification technique for secure geographical routing in VANET', Journal of Theoretical and Applied Information Technology, Vol. 63, No. 3, pp.636-644, ISSN: 1992-8645.
- 60. Anita, X., Martin Leo Manickam, J., and Bhagyaveni, M.A., 2013, 'Two-Way Acknowledgment-Based Trust Framework for Wireless Sensor Networks', International Journal of

- Distributed Sensor Networks, vol. 2013, Article ID 952905, 14 pages, 2013. doi:10.1155/2013/952905 (IF: 1.938)
- 61. Siva Sangari, A., and Martin Leo Manickam, J., 2013, 'Light weight security and authentication in wireless body area network', Indian Journal of Computer Science and Engineering", Vol. 4, No. 6, pp. 438-446.
- 62. Jeyachitra, R. K., and Martin Leo Manickam, J., 2013, 'Tunable and Reconfigurable Spectrum Sliced Microwave Photonic Filter Using Parallel Fabry-Perot Filters with External Delay and Windowing', European Journal of Scientific research, Vol. 103, No. 2, pp.313-325.
- 63. Velmurugan, V., and Martin Leo Manickam, J., 2013, Literature Review on Characteristic Analysis of Efficient and Reliable Broadcast in Vehicular Networks', International Journal of Electronics and Communication Engineering, ISSN 0974-2166 Vol. 6, No 3 (2013), pp. 205-210.
- 64. Jeyachitra, R.K., and Martin Leo Manickam, J., 2013, 'Tunable and Reconfigurable Spectrum Sliced Microwave Photonic Filter Using Parallel Fabry-Perot Filters with External Delay and Windowing, European Journal of Scientific research, Vol. 103, No. 2, pp.313-325.
- 65. Jeyachitra, R.K., and Martin Leo Manickam, J., 2013, 'Reconfigurable Millimeter-Wave Photonic Filter based on spectrum slicing by cascaded Fabry-Perot Filters', Asian Journal of Information Technology, 12(6):170-175.
- Siva Sangari, A., and Martin Leo Manickam J., 2012, 'Intrusion Detection In Wireless Sensor Networks', International Journal of Advanced Computing Volume 35, special issue 2, pp.313-317.
- 67. Martin Leo Manickam, J., and Shanmugavel, S., 2008, 'Fuzzy based Trust Establishment in Mobile Ad hoc

- Networks', International Journal of Systemics, Cybernetics and Informatics, pp.39-48.
- 68. Martin Leo Manickam, J., and Shanmugavel, S., 2007, 'Providing routing security using ROS routing protocol in MANET and Performance comparison in AODV', Information Technology Journal, Vol. 6, No. 5, pp. 656-653.

Conference / workshop attended

:

- 1. P. Thilagavathi and J Martin Leo Manickam, 2023, Circumcenter Based Mobile Beacon Aided Localization in Wireless Sensor Networks, 3rd International Conference on Pervasive Computing and Social Networking (ICPCSN), pp.1107-1111.
- 2. G. Anitha, J. M. L. Manickam, G. Balakrishnan and G. Sathyakumar, 2022, Machine Learning based non-invasive method of determining total body water, 7th International Conference on Communication and Electronics Systems (ICCES), 2022, pp. 1062-1065,
- 3. S. Devipriya, J. M. Leo Manickam and K. Jasmine Mystica, 2022, A Deep-Learning Based approach to Resource Allocation in NOMA Based Cognitive Radio Network with Heterogeneous IoT Users, 2022 IEEE International Conference on Distributed Computing and Electrical Circuits and Electronics (ICDCECE), 2022, pp. 1-6, doi: 10.1109/ICDCECE53908.2022.9793269.
- 4. Vijayalakshmi, K., and Martin Leo Manickam, J., 2016, Mobisink-intelligent mobility pattern based routing protocol for efficient data gathering in large scale wireless sensor networks 2016 International Conference on Control Instrumentation Communication and Computational Technologies.
- Velmurugan, V., and Martin Leo Manickam J, 2016, 'ALPC-A novel technique to eradicate the broadcast storms in VANET', International conference on Futuristic Engineering, Science and Technology, Chennai,

- 6. Jebachristy, A., Thilagavathi, P., Martin Leo Manickam, J., and Anita, X., 2016, 'Dynamic Improved Path Planning for Mobile Beacon in Wireless Sensor Network', Procedia Computer Science, Vol.92, pp.385-388.
- 7. Senthil Kumar, S., and Martin Leo Manickam, J., 2016, 'Energy efficient cluster-based routing protocol for WSN', International conference on Futuristic Engineering, Science and Technology, Chennai
- Veronica and Martin Leo Manickam, J., 2016, 'Portable Data gathering with load balance clustering using Sencar', 3rd International conference on Engineering Technology and Science, Rasipuram
- 9. Samuthira pandi, V., and Martin Leo Manickam J., 2015, 'Energy Conservation model for wireless multi-hop network', International Conference on Computational Intelligence and Computing Research,
- Gomathi, R.M., Martin Leo Manickam, J. and Madhukumar T, 2015, Energy preserved mobicast routing prorocol with static node for underwater acoustic sensor network, IEEE International Conference on Innovation, Information in Computing Technologies, Chennai
- 11. Siva Sangari, A., and Martin Leo Manickam, J., 2014, Public key cryptosystem based security in wireless body area network, 2014 International Conference on Circuits, Power and Computing Technologies, India
- 12. Annadevi, E., and Martin Leo Manickam, J., 2014, Detecting and repairing network partition in wireless sensor networks, International Conference on Circuits, Power and Computing Technologies, India.
- Regan, R., Martin Leo Manickam, J., and Anand R., 2012, 'Huddle Based Tenable Data Communication in Wireless Mesh Networks', 2012 International Conference on Radar, Communication and Computing (ICRCC), pp.11-13.

- 14. Anita, X., Martin Leo Manickam, J., and Bhagyaveni M.A., 2012, 'Acknowledgement-based Trust Framework for Wireless Sensor Networks', International Conference on Advances in Information Technology and Communication AIT 2012, 20 & 21 September, Dubai. (Sept) Part of the Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering book series (LNICST, volume 117)
- 15. Siva Sangari, A., and Martin Leo Manickam, J., 2012, 'Implementation of Zigbee based Patient Remote Monitoring System', New avenues in Sensors and Automation (NASA-12).
- Siva Sangari, A., and Martin Leo Manickam, J., 2012, 'Intrusion Detection In Wireless Sensor Networks', The third International Conference on Sensors and related networks – Sennet'12.
- 17. Rajkumar, S., and Martin Leo Manickam, J., 2010, 'High Performance Dynamic routing for wireless sensor networks', 2nd International Science and Technology (IIST).
- Bhuvaneswari, R., Martin Leo Manickam, J., Bhagyaveni, M. A., and Shanmugavel, S., 2007, 'Secure routing protocol for mobile ad-hoc networks', Proceedings of the 2007 Summer computer simulation conference, July 16-19, San Diego, California.
- 19. Martin Leo Manickam, J., and Shanmugavel, S., 2007, 'Fuzzy Based Trusted Ad hoc On-demand Distance Vector Routing Protocol for MANET', 15th International Conference on Advanced Computing and Communications (ADCOM 2007), Indian Institute of Technology Guwahati, INDIA, pp. 414-421.
- 20. Martin Leo Manickam, J., and Shanmugavel, S., 2005, 'Optimum route updation time to thwart routing update misbehavior in Ad hoc On-Demand Distance Vector routing

- protocol for Mobile Ad Hoc Networks', Proceedings of International Conference on Information Security, Pondicherry Engineering College, Pondicherry, pp. 219-224.
- 21. Martin Leo Manickam, J., and Shanmugavel, S., 2006, 'Resiliency Oriented Secure routing protocol for Malicious Mobile Ad Hoc Networks', International Joint Conference, 3rd Conference on Telematics systems, Services and Applications 2006 (TSSA 2006) and the 1st Conference on Wireless Systems, Services and Applications 2006 (WSSA 2006), December 8-9th, 2006, Institut Teknologi Bandung, Indonesia, pp.246-252.
- 22. Siva Sangari, A., and Martin Leo Manickam, J., 2011, 'Wireless Communication In wireless body Sensor Networks', National Conference on Trends in Electronics, Instrumentation, Embedded System and Automation.
- 23. Anitha, G., and Martin Leo Manickam, J., 2011, 'Co-operative Trust management scheme for Wireless sensor networks', National conference on role of cryptography and Network security in Defence (NCRCNS'11).
- 24. Anita, X., Martin Leo Manickam, J., and Viswanathan, C., 2008, 'Fuzzy based Trust Model for Mobile Ad Hoc Networks', NCETCE 2008, pp. 164-170.

Workshop attended:

- .. Coordinator for the International Seminar on Evolving Trends in Industry 4.0 era for Sustainable Development, organized in association with National Institute of Technical Teachers Training and Research, Taramani, Chennai on 7.2.2024
- 2. Co-coordinator for ATAL FDP Diverse Applications of Research Paradigms in AI from 5.12.2022 to 16.12.2022

3. Completed 2 week Faculty Development programme on Data Science offered by E&ICT, IIT Kanpur from 5.7.2021 to 16.7.2021. 4. Attended the 'International workshop on Cloud computing' organized by MIT, Anna University, Chennai on 20th October 2010 Attended the 'Workshop on SDR based Wireless Communication System Design' organized by College of Engineering, Anna University, Chennai on 9th October 2009 5. Delivered a lecture on 'Secure routing in Mobile ad hoc networks' organized by the College of Engineering, Anna University, Chennai on 30th March 2007 7. Participated in the 'Workshop on Mobile ad hoc networks' organized by College of Engineering, Anna University, Chennai from 26th December 2002 to 27th December 2002 8. Attended ISTE winter school on Telecommunication in Bio medical Engineering' organized by Pondicherry Engineering college, Pondicherry from 15th March 1999 to 27th March 1999 9. Attended the 'Workshop on laser applications' organized by Regional Engineering college, Tiruchirappalli on 15th March 1997. **Funded Project** Co-Investigator for the project titled "Extraction of Buildings Details from Satellite Imagery of Urban Area through Transfer learning of Deep Learning Networks", funded by ISRO with a total funding Rs. 19.82 lakhs during the period 2022 to 2024. Ph.D Guidance Completed – 11 Pursuing - 06 **Patents** Granted – 01 A patent titled Physiological value-based implanted medical device security system bearing application number 202041003326 is granted. (**Patent No: 516092**)

Awards & Acheivements	:	Reviewer for IEEE Sensors, IEEE Access, Elsevier Optik & Elsevier Computer communications Fellow in IEI and IETE Doctoral committee member for Anna university, VIT-Chennai, SRM University and Sathyabama University Expert Member for Anna university Ph.D Viva-voce Examination
-----------------------	---	--

FACULTY PROFILE FORMAT (Format 3)