


FACULTY PROFILE

Name of Teaching Staff / RMK ID	Dr.A.MERLINE/ T1115			
Designation	PROFESSOR			
Department	ECE			
Date of Joining the Institution	12-07-2023			
Qualifications	B.E. (ECE)	M.E.(Communication Systems)	Ph.D	
Total Experience	Overall : 27 YEARS		in RMK : 0 YEARS	
Papers Published in Journal	Overall : 23		After Joining RMK : 0	
List of Papers Published	<ol style="list-style-type: none"> 1. Amalorpava Mary Rajee S, A.Merline and M.M. Yamuna Devi, “Game Theoretic Model for Power Optimization in Next-generation Heterogenous Network”, Signal, Image and Video Processing, May 2023. 2. D.Anu Disney and A.Merline, “An improved fuzzy logic-based small cell deployment in NOMA-HetNet: a novel sun flower-based tunicate swarm optimization-oriented multi objective concept”, Sadhana, April 2023. 3. D.Anu Disney and A.Merline, “An optimized small-cell planning procedure for Heterogeneous Network to improve network energy efficiency”, International Journal of Communication Systems, February 2023 4. S. Ramesh Kumar, R. Ganesan, A. Merline, “Progressive Transfer Learning-based Deep Q Network for DDOS Defence in WSN”, Computer Systems Science and Engineering 2023, 44(3), 2379-2394, January 2023 5. Deepa Palani, A. Merline, “User Offloading using Hybrid NOMA in Next generation Heterogeneous Network ”Journal of Microelectronics, Electronic Components and Materials, Vol. 52, No. 4(2022), 			

pp.263 – 269

6. Amalorpava Mary Rajee S and **A. Merline**, “Performance analysis of flexible indoor and outdoor user distribution in urban multi-tier heterogeneous network”, International Journal of Mobile Communication, Vol.21, No.1.2022.
7. S.Anu Disney and **A. Merline**, “A Novel Fuzzy Based User Pairing and Cuckoo Search Optimization Approach for Small Cell Deployment in NOMA-HetNet” Journal of Intelligent and Fuzzy Systems, Vol. 43, No. 3 pp. 3141-3154, July 2022
8. S Regina and **A. Merline**, “Impact Analysis of Metamaterial Superstrate Stack Loaded on the Top of the Microstrip Patch Antenna Structure for GSM Application”, Solid State Technology, 63 (5), 7425-7438.
9. S Regina and **A. Merline**, “Flexible leather substrate dual-band wearable antenna with impact analysis on testing under wet condition for human rescue system”, Textile Research Journal, Vol.91, Issue: 17-18, Pages: 1927-1942, 2020
- 10.N. M. Masoodhu Banu, **A. Merline**, T. Sujithra, “PO Assessment and Attainment through POGIL Based Classes”, Journal of Engineering Education Transformations, 2020, Volume: 33, Issue: 4, Pages: 76-83
- 11.Amalorpava Mary Rajee S and **A. Merline**, “Machine Intelligence Techniques for Blockage Effects in Next – Generation Heterogeneous Networks”, Radioengineering, Vol.29(3), 555 – 562, September 2020.
- 12.Abdul Sikkandhar Rahamathullah, **A. Merline**, Guruprakash Baskaran, ” Review on Spectrum Sharing Approaches Based on Fuzzy and Machine Learning Techniques in Cognitive Radio Networks”, New Trends in Computational Vision and Bio-inspired Computing: Selected works presented at the ICCVBIC 2018, Coimbatore, India, Springer International Publishing, 1615-1622
- 13.Deepa Palani, **A. Merline**, “Energy Efficient Solutions for Green Cellular Networks–a Survey”, International

Journal of Electronics and Communication Engineering and Technology, Volume 9, Issue 5, September-October 2018, pp. 1-16,

14. T.Siva and **A. Merline**, "A Comparative Study on Energy Efficient Techniques in Wireless Sensor Networks", Journal of Advance Research in Dynamical & Control Systems, Vol.11, July 2019.
15. Amalorpava Mary Rajee S and **A. Merline**, "A Survey on Modeling and Coverage Analysis of Heterogeneous Network", International Journal of Recent Technology and Engineering, Vol. 8(1), pp. 524-531, May 2019.
16. Deepa and **A. Merline**, "Energy Efficient Solutions for Green Cellular Networks –A Survey" International Journal of Electronics and Communication Engineering and Technology, Volume 9, Issue 5, Sept.-Oct. 2018, pp. 1-16 (Google Scholar Indexed)
17. Jalal Deen K, Ganesan R and **A. Merline**, "Fuzzy-C-Means Clustering Based Segmentation and CNN-Classification for Accurate Segmentation of Lung Nodules", Asian Pacific Journal of Cancer Prevention, Vol. 18(7), July 2017, pp. 1869 - 1874.
18. D.Paulraj and **A. Merline**, "Environmental Adaptive CFAR Detector for MIMO Radar", International Journal of Applied Engineering Research, Vol.10, No.42(2015)
19. **A. Merline** and S.J.Thiruvengadam, "MIMO radar waveform design with peak and sum power constraints", EURASIP Journal on Advances in Signal Processing, July 2013.
20. **A. Merline** and S.J.Thiruvengadam, "Multiple-input multiple-output radar waveform design methodologies", Defence Science Journal, Vol.63, No.4, July 2013, pp.393-401.
21. **A. Merline** and S.J.Thiruvengadam, "Design of Optimal Linear Precoder and Decoder for MIMO Channels with Per Antenna Power Constraint and Imperfect CSI", Wireless Personal Communications, Vol. 72, No.4, October 2013.
22. **A. Merline** and S.J.Thiruvengadam, "Power allocation strategies for MIMO radar waveform

	<p>design”, Iranian Journal of Electrical and Electronics Engineering, Vol.7, No.2, June 2011, pp. 106-111.</p> <p>23.K.Ashok Kumar and A. Merline, “Beamforming for Phased MIMO-Radar Using MVDR Algorithms”, International Journal of Computational Intelligence and Informatics, Vol. 2: No. 4, January - March 2013.</p>	
Papers Presented in Conferences (Scopus / WoS indexed only)	Overall : 3	After Joining RMK :0
Ph.Ds / Projects Guided	Ph.Ds Guided : 6	Student Projects Guided : 35
Books Published :	Count : 0	
Patents	Published Count : 0	Granted Count : 0
Professional Memberships	Count :3	
	List :IETE, ISTE, IE	
Consultancy Projects Completed	Count : 0	
Awards Received	Count : 0	
	List :	
Research grants Received	Nil	
Orchid Link / ID	ID : 0000-0001-9645-7264	

Google Scholar Link / ID	https://scholar.google.co.in/citations?hl=en&user=iRfzPuYAAAAJ&view_op=list_works&authuser=1
Vidwan Link / ID	ID : https://vidwan.inflibnet.ac.in//profile/404132
Research Gate Link / ID	ID: https://www.researchgate.net/profile/Merline-Arulraj-2
Scopus Link / ID	ID: 44061847000