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### **LAST FIVE YEAR PUBLICATIONS**

1. P. Kavitha, K. M. Mohan, R. Surya, R. Gandhiraj, and K. P. Soman, "**Implementation of CDMA in GNU Radio,**" *Procedia Computer Science*, vol. 46, pp. 981–988, 2015. doi:10.1016/j.procs.2015.01.008. (**Scopus Indexed**)
2. C. Anjana, S. Sundaresan, T. Zacharia, R. Gandhiraj, and K. P. Soman, "**An Experimental Study on Channel Estimation and Synchronization to Reduce Error Rate in OFDM Using GNU Radio,**" *Procedia Computer Science*, vol. 46, pp. 1056–1063, 2015. doi:10.1016/j.procs.2015.01.017. (**Scopus Indexed**)

#### **Publications in International Conferences**

3. I Harun Surej; S Karthic; G Vigneshwara; T Jeyashri; R Thiruvengadathan; R Gandhiraj; K.A Pradeep Kumar; B.N Binoy; G.A Shanmugasundaram G A, "**Evidence of Scatter in C-band Spatio-temporal Signals using Machine Learning Models**", Proceedings of the 2020 IEEE International Conference on Communication and Signal Processing, ICCSP 2020, 2020, pp. 1288-1292. (**Scopus Indexed**)
4. S Surya Natarajan, R Ateesh Varun, G Shivasubramanian, D Thamayandran, M Dharani, R Gandhiraj, G A Shanmugha Sundaram, A K Pradeep Kumar, N B Binoy, R Thiruvengadathan, D S Harish Ram, "**Detection of Interference in C-Band Signals using K-Means Clustering**", Proceedings of the 2020 IEEE International Conference on Communication and Signal Processing, ICCSP 2020, 2020, pp. 1521-1526. (**Scopus Indexed**)
5. Vignesh, R., Sundaram, G.A.S., Gandhiraj, R., "**Phase-modulated stepped frequency waveform design for low probability of detection radar signals**" *Advances in Intelligent Systems and Computing*, 2020, 910, pp. 181-195 (**Scopus Indexed**)
6. Pratibha, C., Manish Reddy, K., Bharathi, L., Manasa, M., Gandhiraj, R. "**Simulation of Dual Polarization Radar for Rainfall Parameter and Drop Size Distribution Estimation**" *Advances in Intelligent Systems and Computing*, 2020, 1039, pp. 424-433 (**Scopus Indexed**)
7. Gopal, S. Jaiyant, J. Ramnarayan, S. Kirthiga, M. Jayakumar, M. Nirmala Devi, R. Gandhiraj, and Subhash Chandra Bera. "**Capacity Analysis of Correlated MIMO in GEOSAT Downlink Land Mobile System.**" In 2018 International Conference on Advances in Computing, Communications and Informatics (ICACCI), pp. 1594-1600. IEEE, 2018. (**Scopus Indexed**)
8. Pandey, Amitesh, R. Gandhiraj, S. Kirthiga, M. Jayakumar, M. Nirmala Devi, and Subash Chandra Bera. "**Emulation of Channel Model and Estimation for MIMO based Satellite Land Mobile System using Software Defined Radio.**" *Procedia computer science* 143 (2018): 868-875. (**Scopus Indexed**)
9. Muthukumar, S.P., Gandhiraj, R., Sundaram, G.S., "**Robust waveform design and analysis of active radar for the detection of target**", 2nd International Conference on Micro-Electronics and

Telecommunication Engineering, ICMETE 2018; Delhi NCR Campus Ghaziabad; India; 20 September 2018 through 21 September 2018; DOI: 10.1109/ICMETE.2018.00062.

10. Gandhiraj R, Soman K P, Sukesh K, Kashyap K V P, Yaswanth K, Haswanth K, "**Design and parameters measurement of Tin-Can antenna using Software Defined Radio**", International Conference on Soft Computing Systems (ICSCS-2018), 19-20 April 2018, Publication in Springer - Communications in Computer and Information Science (CCIS) Series. **(Scopus Indexed)**
11. Gandhiraj R, Vinutna T, Sai Bharath Kumar B, Venu Sri Sushma K, Soman K P, "**Outernet: A digital Library at zero cost for Indian Schools**", 2017 IEEE International Conference on Communication and Signal Processing (ICCSP 2017), Tamil Nadu, 6-8 April 2017. **(Scopus Indexed)**
12. Prathija Raja, Ganesh Subramanian Alwarappan, Sajin S, Shanmathi C and R Gandhiraj, "**Classification of EMI Signatures for Smart Grid**", 2017 IEEE International Conference on Communication and Signal Processing (ICCSP 2017), Tamil Nadu, 6-8 April 2017. **(Scopus Indexed)**
13. Anand R, Rohit Kumar K, Gandhiraj R, "**Implementation of Noise cancellation using Least Mean Square in GNU Radio**", 2017 IEEE International Conference on Computer Communication and Informatics (ICCCI 2017), Coimbatore, 5-7, January 2017. **(Scopus Indexed)**
14. Haritha H, Seethal C R, Gandhiraj R, "**Realization of Kalman Filter in GNU Radio**", 2017 IEEE International Conference on Computer Communication and Informatics (ICCCI 2017), Coimbatore, 5-7, January 2017. **(Scopus Indexed)**
15. Adarsh J, Vishak P, Gandhiraj R, "**Adaptive Noise Cancellation Using NLMS Algorithm in GNU Radio**" 2017 IEEE 4th International Conference on Advanced Computing and Communication Systems (ICACCS 2017), Coimbatore, 6-7, January 2017. **(Scopus Indexed)**
16. Suganya M, Gandhiraj R, "**Applicability of MIMO and OFDM technology to SATCOM**", 5th IEEE International Conference on Communication and Signal Processing-ICCSP'16, Department of Electronics and Communication Engineering , Adhiparasakthi Engineering College, Melmaruvathur, Tamil Nadu, 6-8 April 2016. **(Scopus Indexed)**
17. Surya Subramanian, Gandhiraj R, "**Insight to AMP and ADMM Based Sparse Signal Reconstruction**", 5th IEEE International Conference on Communication and Signal Processing-ICCSP'16, Department of Electronics and Communication Engineering , Adhiparasakthi Engineering College, Melmaruvathur, Tamil Nadu, 6-8 April 2016. **(Scopus Indexed)**
18. Natarajan C, Varun Prathab M S, Priyanka P, Jayant M, Gandhiraj R, "**Shannon-Fano-Elias Coding for Android Using Qt**", 5th IEEE International Conference on Communication and Signal Processing-ICCSP'16, Department of Electronics and Communication Engineering , Adhiparasakthi Engineering College, Melmaruvathur, Tamil Nadu, 6-8 April 2016. **(Scopus Indexed)**
19. Janaki Radhakrishnan, Sarayu S, George Kurian, Deepak Alluri, Gandhiraj R, "**Huffman Encoding and Decoding Using Android**", 5th IEEE International Conference on Communication and Signal Processing-ICCSP'16, Department of Electronics and Communication Engineering , Adhiparasakthi Engineering College, Melmaruvathur, Tamil Nadu, 6-8 April 2016. **(Scopus Indexed)**

20. Aswin A, Arjun G Nair, Nikhil Radhakrishnan, Kirandeep D, Gandhiraj R, "**Android Application using Qt for Shanon-Fano-Elias Decoding**", 5th IEEE International Conference on Communication and Signal Processing-ICCSP'16, Department of Electronics and Communication Engineering , Adhiparasakthi Engineering College, Melmaruvathur, Tamil Nadu, 6-8 April 2016. (**Scopus Indexed**)
21. Vidhyaa V G, Aarthi Rajalakshmi S, Ragavi Raghavan, Venu Gopal G S V, Gandhiraj R, "**Huffman Encoding and Decoding algorithm using IJulia**", 5th IEEE International Conference on Communication and Signal Processing-ICCSP'16, Department of Electronics and Communication Engineering , Adhiparasakthi Engineering College, Melmaruvathur, Tamil Nadu, 6-8 April 2016. (**Scopus Indexed**)
22. Vyshnavi P, Tamil Selvi P, Gandhiraj R, "**Android App for Arithmetic Encoding and Decoding**", 5th IEEE International Conference on Communication and Signal Processing-ICCSP'16, Department of Electronics and Communication Engineering , Adhiparasakthi Engineering College, Melmaruvathur, Tamil Nadu, 6-8 April 2016. (**Scopus Indexed**)
23. Aswathi, M., R. Gandhiraj, and K. P. Soman. "**Application and Analysis of Smart Meter Data along with RTL SDR and GNU Radio.**" *Procedia Technology* 21 (2015): 317-325.
24. Santhosh S, Arunselvan S J, Aazam S H, Gandhiraj R, "**Multicast WebSDR implementation using RTL-SDR**", 2nd IEEE International Conference on Innovations in Information, Embedded and Communication Systems, Department of ETE, Karpagam College of Engineering, Coimbatore, Tamil Nadu, India, 19-20 March 2015. (**Scopus Indexed**)
25. Lekshmi Kiran S, Parvathy G Mol, Hisham P.M, Gandhiraj R, Soman K P, "**Study of multirate systems and filter banks using GNU Radio**", 4th IEEE International Conference on Communication and Signal Processing-ICCSP'15, Department of Electronics and Communication Engineering, Adhiparasakthi Engineering College, Chennai, 2-4 April 2015. (**Scopus Indexed**)
26. Aswathy C, Sowmya V, Gandhiraj R, Soman K P, "**Hyperspectral Image Denoising Using Legendre Fenchel Transformation for Improved Multinomial Logistic Regression based Classification**", 4th IEEE International Conference on Communication and Signal Processing-ICCSP'15, Department of Electronics and Communication Engineering, Adhiparasakthi Engineering College, Chennai, 2-4 April 2015. (**Scopus Indexed**)
27. Sundaresan S, Anjana C, Tessy Zacharia, Gandhiraj R, "**Real Time Implementation of FMCW Radar for Target Detection using GNU Radio and USRP**", 4th IEEE International Conference on Communication and Signal Processing-ICCSP'15, Department of Electronics and Communication Engineering, Adhiparasakthi Engineering College, Chennai, 2-4 April 2015. (**Scopus Indexed**)
28. Kokila M, Kavinandhini M, Vishnu R, Gandhiraj R, "**Linear Algebra Tool box for GNU Radio Companion**", 4th IEEE International Conference on Communication and Signal Processing-ICCSP'15, Department of Electronics and Communication Engineering, Adhiparasakthi Engineering College, Chennai, 2-4 April 2015. (**Scopus Indexed**)