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Area of interest: VLSI Design and Testing, Communication Systems

PAPERS PUBLISHED IN INTERNATIONAL JOURNALS & NATIONAL JOURNALS:

1. **Ramesh Jayabalan** and Govindaraj Vellingiri (2017), “Adaptive neuro fuzzy inference system-based power estimation method for CMOS VLSI circuits” International Journal of Electronics, **Taylor and Francis (Impact Factor 0.729)** Volume 105, Issue 3, July 2018, PP.398-411.
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3. **Ramesh Jayabalan** and Michaelraj Kingston Roberts, (2016), ‘An Improved Self Adaptive Min-Sum Decoding Algorithm for Flexible Low-Density Parity-Check Decoder’ National Academy Science Letters, **November 2016, Springer (Impact Factor 0.292) (ISSN : 0250-541X)**
4. **Ramesh Jayabalan** and Michaelraj Kingston Roberts, (2014), ‘An Area Efficient and High Throughput Multi-Rate Quasi-Cyclic LDPC Decoder for IEEE 802.11n Applications’, Microelectronics Journal (**Elsevier**), vol.45, no.11, pp. 1489-1498. (**Impact Factor : 0.924) (ISSN: 0026-2692)**
5. **Ramesh Jayabalan** and Michaelraj Kingston Roberts, (2015), ‘A Modified Optimally Quantized Offset Min-Sum Decoding Algorithm for Low Complexity LDPC Decoder’, Wireless Personal Communications (**Springer**), Vol.80, Issue No.2, pp.561-570 (**Impact Factor: 0.979) (ISSN: 0929-6212).**
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7. **Ramesh Jayabalan** and Michaelraj Kingston Roberts, (2015), ‘A Power and Area Efficient Multi-Rate Quasi-Cyclic LDPC Decoder’, Journal of Circuits, Systems and Signal Processing (**Springer**), Vol.34, Issue No.6, pp.2015-2035 (**Impact Factor: 1.264) (ISSN: 0278-081X).**

8. **Ramesh Jayabalan** and Michaelraj Kingston Roberts, (2015), 'An Improved Low Complex Hybrid Weighted Bit-Flipping Algorithm for LDPC Codes', Wireless Personal Communications (**Springer**), Vol.82, Issue No.1, pp.327-339 (**Impact Factor : 0.979**) (**ISSN: 0929-6212**).
9. **Ramesh J.**, Michaelraj Kingston ROBERTS & S. Finney Daniel (2013), "Performance Analysis of Steepest Descent Decoding Algorithm for LDPC Codes", International Journal on Recent Trends in Engineering & Technology, vol. 4, no 2, pp. 112-117.
10. **Ramesh J.** and Gunavathi K. (2007), 'A Novel Built-In Self-Test Architecture for Charge-Pump Phase Locked Loops', International Journal on Programmable Devices, Circuits and Systems (ICGST-PDCS), Vol. 7, Issue 1, pp.1-6.
11. **Ramesh J.**, Vanathi P.T and Gunavathi K. (2008), 'Fault Classification in Phase Locked Loops using Back Propagation Neural Networks', International Journal of Soft Computing Applications (IJSCA), No. 3, pp. 77-95.
12. **Ramesh J.**, Gunavathi K. (2009), 'A Novel Linear Ramp Generator for Analog and Mixed Signal Built-In Self-Test Applications', International Journal of Electrical Engineering and Embedded Systems, Issue 1, pp. 21-32.
13. **Jayabalan Ramesh**, Vanathi P.T and Gunavathi K. (2008), 'Fault Classification in Phase Locked Loops using Back Propagation Neural Networks', Electronics and Telecommunication Research Institute (**ETRI**) Journal, Vol. 30, No. 4, pp. 546-554. (**Impact Factor 0.97**)
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15. **Ramesh J.** and Dr. K. Gunavathi (2009), 'A Novel Current Mirror for On-Chip Ramp Generation', National Journal of Technology, Vol. 5, No.2, pp. 12-23.
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19. **Ramesh J** and B. Vinodh Kumar (2016) "Improved Automatic CAN protocol based on Payload reduction and selective bit stuffing" Circuits and Systems Journal, Vol.7, No.10, August , 2016, 3415-3429.

20. **Ramesh Jayabalan** and Govindaraj Vellingiri (2017), “An Improved Low Transition Test Pattern Generator for Low Power Applications” Journal of Design Automation for Embedded Systems, (Springer) December 2017, Vol. 21, Issue 3-4, pp. 247-263(Impact Factor 0.516) ISSN: 0929-5585.
21. **J. Ramesh**, K.Thiruvenkadam and Anjali S.Pillai (2018), “Area- Efficient Dual-Mode Fused Floating-Point Three Term Adder” Accepted for publication in Journal of Circuits, Systems and Signal Processing, Springer (Impact Factor 1.694).
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23. **J.Ramesh** and Dhanasekar.S, (2015), “FPGA Implementation of Variable Bit Rate 16 QAM Transceiver System”, International Journal of Applied Engineering Research, ISSN 0973-4562 Volume 10, Number 10 (2015) pp. 26497-26507.
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25. **J.Ramesh** and Sanjana Prasad, 2019. “PAPR reduction in OFDM using scaled particle swarm optimization based partial transmit sequence technique” Journal of Engineering, IET Journals, eISSN 2051-3305
26. **J.Ramesh**, T.Mythili and Dr. P. Ramanathan, 2019, “Innovative Localization Algorithm using the Line of Intersection Technique in Wireless Sensor Networks” Journal of Internet Technology, Vol. 5, pp. 3460-3468.
27. Sanjana Prasad, Dr. J. Ramesh, 2020, “PAPR reduction in OFDM system using Modified SLM with different phase sequences” Journal of wireless personal communication , 110(2), 913-928.

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1. **Ramesh J.** and Dr. K.Gunavathi K. (2007), ‘A 8-bit TIQ based 780 MSPS CMOS Flash A/D Converter” Proceedings of International Conference on Computational Intelligence and Multimedia Applications (ICCIMA), Sivakasi, pp. 201-205.
2. **Ramesh J, Dr. K.Gunavathi** and Kandavel R (2008) , “ An Efficient 8-bit current steering Digital-to-Analog Converter” Proceedings of International Conference on VLSI Design and Embedded Systems (ICVLSI), Chennai , pp. 83-89.

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7. **Ramesh J.,** Dr. K.Gunavathi, S. Ashwin and S.Aravind Kumar, (2012) “Novel and Secure Encoding and Hiding techniques using Image Stegnography: A Survey” has been accepted for publication in the proceedings of ICETEEEM – 2012, International conference on emerging trends in Electrical Engineering and Energy Management, Chennai.
8. **Ramesh J & Michaelraj Kingston ROBERTS** (2013), “A reduced complexity FFT based Sum-Product decoding algorithm for LDPC codes”, International Conference on intelligent and efficient electrical systems (ICIEES’13), PSG College of Technology, Coimbatore, INDIA.
9. **Ramesh J & Govindaraj V** (2013), “Power minimization by Prims algorithm based reordering”, **International Conference** on intelligent and efficient electrical systems (ICIEES’13), PSG College of Technology, Coimbatore, INDIA.
10. **Ramesh J** and Sanjana Prasad, (2017), “Partial Transmit sequence based PAPR reduction with GA and PSO optimization techniques” IEEE sponsored 4th International conference on Innovation and Information, Embedded and Communication Systems (ICIECS’ 17), 17th -18th March 2017, Vol.3, Page No: 24-27, Karpagam College of Engineering, Coimbatore .
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12. **Ramesh J** and Sanjana Prasad, (2017), “ Scaled offset PSO based PTS for PAPR reduction in OFDM systems” Accepted for presentation in 8th IEEE Annual Ubiquitous Computing, Electronics and Mobile communication conference (IEEE UEMCON 2017) Columbia University, New York, USA to be held on 19th -21st, October 2017.
13. **Ramesh J** and Dhanasekar.S, 2017 “FPGA Implementation of Variable Bit rate OFDM Transceiver system for Wireless applications”, International Conference on Innovations in Electrical, Electronics, Instrumentation and Media Technology ICIEEIMT 2017, Karunya university, Coimbatore. pp. 343-346. DOI: [10.1109/ICIEEIMT.2017.8116863](https://doi.org/10.1109/ICIEEIMT.2017.8116863)

14. **J. Ramesh** and B. Vinodh Kumar, "Automotive in vehicle network protocols," 2014 International Conference on Computer Communication and Informatics, Coimbatore, 2014, IEEE Xplore: 16 October 2014 pp. 1-5. doi: 10.1109/ICCCI.2014.6921836

National Conference: 34

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2. **Ramesh J.**, R. Anitha & Michaelraj Kingston.R (2013), "Multi Layer Perceptron Neural Network Based Decoder for LDPC codes", DRDO Sponsored Second National Conference on "Communication Technology Interventions for Rural and Social Development" Sri Krishna College of Engineering and Technology, Coimbatore during 14th -15th, February 2013.
3. **Ramesh J.**, Finney Daniel, R. Anitha, Michaelraj Kingston.R (2013), "Performance Analysis of LDPC Iterative Decoding Techniques for IEEE 802.16e ", National Conference on Advanced Computing and Communication Systems" held at Government College of Technology, Coimbatore on 26th April 2013.
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14. **Ramesh J .**, Michaelraj Kingston ROBERTS & R. Praveen Kumar (2014), “Design and development of decoder architecture for IEEE 802.11n LDPC codes”, 6th National Conference on Signal Processing, Communication and VLSI Design (NCWCV-2014), ANNA UNIVERSITY Regional Centre, Coimbatore, INDIA. **(Received the Best Paper Award)**
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17. **Ramesh J.** and Shoukath Ali (2012) ‘Power Reduction in Coded OFDM’, Proceedings of National Conference on Communication Technology Interventions for Rural and Social Development (NCCTIRD-2012), Sri Krishna College of Engineering and Technology, Coimbatore.
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