

## PROFILE



### PERSONAL DATA

Name : M.Kamaraju  
Date of Birth : 01 July 1970  
Citizenship : Indian  
Sex : Male  
Address for Correspondence : Professor & Mentor (AS&A),  
Department of E.C.E.,  
Gudlavalleru Engineering College,  
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### ACADEMIC RECORD:

1. 2012 Ph.D Awarded Doctor of Philosophy in the faculty of Electronics and Communication Engineering in the area of Low power VLSI design for the thesis titled "Power Optimized Programmable Embedded controller" by JNTUH, Hyderabad on 1<sup>st</sup> June 2012
2. 2001 M.E Master of Engineering (Electronic Instrumentation) from Andhra University, Visakhapatnam with **83%** marks.
3. 1993 B.E Bachelor of Engineering (Electronics and Communication) from Andhra University, Visakhapatnam with **61.1%** marks.
4. 1988 Intermediate Intermediate ( Maths, Physics, Chemistry) from Board of Intermediate Education, A.P with **71.1%** marks.
5. 1986 S.S.C S.S.C from Secondary Board, A.P. with **80%** marks.

### PREVIOUS APPOINTMENTS:

#### Experience: A total of 27 Years in the field of Teaching

2006 – Present Professor in Electronics and communication Engineering Dept. at Gudlavalleru Engineering College, Gudlavalleru.

\*2008-2017: Head of the Department, Electronics & Communication Engineering.

\*2017- Present: Mentor (AS&A) of the Department, Electronics & Communication Engineering.

**# In the year 2012**, JNTUK, Kakinada ratified the post of Professor in the Dept.of Electronics and Communication Engineering

2001 – 2006	Associate Professor in Electronics and Communication Engineering Dept. at Gudlavalleru Engineering College, Gudlavalleru.  * <b>2002-2003</b> : Head of the Department, Computer Science & Engineering  # <b>Inthe year 2005</b> , JNTU, Hyderabad ratified the post of Associate Professor in the Dept.of Electronics and Communication Engineering
2000 – 2001	Assistant Professor in Electronics and communication Engineering Department at Gayatri Vidyaparishad College of Engineering, Madhuravada, Visakhapatnam.
1999 – 2000	Lecturer (part time) in Electronics and Communication Engineering Department at College of Engineering, Andhra University, Visakhapatnam.
1997 – 1999	Lecturer in Electronics and Communication Engineering Department at N.B.K.R.Institutue of Science and Technology, Vidyanagar.
1994 – 1997	Lecturer in Electronics Department at SGD & PG College (Affiliated to AU), Visakhapatnam
1993 – 1994	Engineer in Electronics division, ELICO Industries Ltd., Hyderabad

#### **MEMBERSHIPS OF PROFESSIONAL BODIES**

- 1.Fellow of Institution of Electronics and Telecommunication Engineers (F- 188534 L)
- 2.Fellow of Institution of Engineers (IE) (F-116926-9)
- 3.Member of VLSI Society of India (MVSI)
- 4.Life member of Indian Society for Technical Education (LM 94296)
5. Member of IEEE ( No. 91141810)

#### **RESEARCHER IDS:**

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#### **PUBLICATIONS**

##### **JOURNAL:87**

1. **M.Kamaraju**,,K.Lalkishore, A.V.N.Tilak, “Power Optimized Programmable Embedded Controller “International Journal of Computer Networks & Communications (IJCNC), Vol.2,

No.4, July 2010,pp 97 -107 DOI : 10.5121/ijcnc.2010.2409[ISSN - Online: 0974 - 9322,Print : 0975- 2293]

2. **M.Kamaraju**, "A Novel design of Low cost Real Time Vehicle Navigation System,"International Journal of Engineering Science &Technology(IJEST),Vol.2,No.8, August 2010,pp3707-3711 [ISSN - Online: 0975 - 5462]
3. **M.Kamaraju**, K.Lal Kishore, A.V.N.Tilak, "Power Optimized ALU for Efficient Data path," International Journal of Computer Applications(IJCA),Vol.11, No.11, December 2010, pp 39 -43 DOI : 10.5120/1624-2185 [ISSN - Online: 0975 - 8887, ISBN: 978-93-80747-14-9]
4. **M.Kamaraju**, "A Novel Design of Low cost Integrate Intelligent Security System for Industrial Surveillance,"International Journal of Engineering & Technology (IJET),Vol.2,No.6,December 2010, pp. 406 – 409. [ISSN - Online: 0975 - 4024]
5. **M.Kamaraju**, K.Lal Kishore, A.V.N.Tilak , "Implementation of Low Power Datapath and Control Units of 8- bit Processor,"International Journal of Recent Trends in Engineering &Technology(IJRTE), Vol.4 , No.3, Nov 2010, pp 22-26 DOI :01.IJRTET.04.03.87 [ISSN - Online: 2158-5555]
6. **M.Kamaraju**, R.Swati, "GPRS based vehicle Navigation System using ARM Processor," Springer series of computer communication and information systems , Vol.182, May 2011, pp 25-31
7. **M.Kamaraju**, K.LalKishore, A.V.N.Tilak, "A Novel Implementation of Application Specific Instruction-set processor(ASIP) using Verilog" International Journal of Science, Engineering and Technology(pISSN 2010-376X, eISSN 2010-3778), Issue 59, Nov 2011, pp 382-387
8. **M.Kamaraju**, K.Lal Kishore, A.V.N.Tilak, " FPGA Implementation and verification of ARNIC core," Journal of arXiv.org (e print archive), Cornell University e library, vol.1109,Nov, 2011.
9. **M.Kamaraju**, Praveen V N desu," A Novel Implementation of RISI Controller employing adaptive clock gating technique" International Journal of Advanced Computer Science and Applications (IJACSA), Vol.2, Issue 11, Dec 2011,(ISSN : 2156-5570(Online) & ISSN : 2158-107X(Print), pp 21-27.
10. Baburao Kodavati, Sajja sri Gowry, A.V.N.Tilak, **M.Kamaraju**, "Health monitoring biomedical sensor data compression using RLE," International Journal of VLSI &Signal Processing Applications, Vol. 1 , Issue 3, July 2011, pp 27-36 ( ISSN 2231-3133)
11. **M.Kamaraju**, Tholada AppaRao,, Kodavati BabuRao, M. Maria Das , Addanki Purna Ramesh, "Development of Antenna Head Interface Unit Using FPGA", International Journal of Biomedical Signal Processing (IJBSP), (ISSN: 0975-8186), Vol.2 No.2 2011, PP109-119.
12. **M.Kamaraju**, Praveen V N Desu,"FPGA Implementation of RISA IC using Verilog," Journal of Innovation in Electronics & Communication[ISSN: 2249-9946], Vol.2, Issue 2, Jan 2012, pp.189-193
13. A.Mallaiah, G.Harish, **M.Kamaraju**, T.Subhashini, "Implementation of AHB bus tracer with dynamic multi resolution for lossless real time compression," International journal of Engineering Science & Advanced Technology [IJESAT, ISSN: 2250–3676],May-Jun 2012 ,Volume-2, Issue-3, pp 445 – 448.
14. N.Swathi, **M.Kamaraju**,"FPGA Implementation of Intellegent Embedded system for distributed Electrical Appliances," International Journal of Computers and Technology[ ISSN: 2277-3061],July-August 2012, Vol.3, Issue 2, pp 113-116.
15. J.Tulasi,T.Venkatalaxmi,**M,Kamaraju**," FPGA Implementation of Convolution Encoder & Hard decision Viterbi decoder",International Journal of Computer & Communication

Technology (IJCTT) [ ISSN (ONLINE): 2231 - 0371, ISSN (PRINT): 0975 - 7449 ],Vol.-3 , Issue - 4 , 2012, pp 43-47.

16. V.Swathi, **M.Kamaraju**, "FPGA Implementation of Intelligent Embedded System for Distributed Electrical Appliances,"International Journal of Computers & Technology [www.ijctonline.com ISSN: 2277-3061] ,Vol. 3, No. 1, August, 2012, pp 113-116.
17. **M.Kamaraju**, N.Sambamurthy, "FPGA Implementation of Multiprocessor Core Architecture for Embedded Concurrent Computing," Proc.of International Conference ARTCom 2012, LNEE, 2012.© Springer-Verlag Berlin Heidelberg 2012, October 2012,pp. 75–80
18. **M.Kamaraju**, P.Pavan, "Implementation of Low Power Frame Synchronizer and Code Group Detector for 3G Asynchronous W-CDMA systems on FPGA" International Journal of VLSI & Signal Processing Applications, 2012, Vol., 2, Issue. 5, ISSN 2231-3133, pp: 403-408.
19. **M.Kamaraju**, M.Alekhya , K. Lal Kishore , "A Novel Implementation Of 32 bit VLIW-MISC Processor on FPGA" International Journal of Computer and communication Technology, December 2012,Vol 4, Issue 2,(ISSN (PRINT): 0975 – 7449), pp 93-96.
20. **M.Kamaraju**, B.Ananda Krishna, B.Rajasekhar, P.Anil Kumar, "A Novel Implementation of Fingerprint Recognition System using DSP Processor", International Journal of Engineering Research and Technology (IJERT), AAMT-2013, pp. 3-6, ISSN:2278-0181, March-2013.  
**Impact Factor:1.76**
21. **M.Kamaraju**, B..Ananda Krishna, B.RajaSekhar, P.Anil Kumar, "A Novel Implementation of Fingerprint Recognition System using DSP Processor" in International Journal of Engineering and Technology (IJERT), AAMT-2013, pp. 3-6, (ISSN:2278-0181), March-2013.
22. B.Ananda Krishna, **M.Kamaraju**, B.Rajasekhar, B.Kranthi, "Enhanced SPIHT Algorithm for Image Compression", International Journal of Engineering Research and Technology (IJERT), AAMT-2013, pp. 15-18, ISSN:2278-0181, March-2013. **Impact Factor:1.76**
23. B.Rajasekhar, U.Siva Reddy, **M.Kamaraju**, B.Ananda Krishna, "Fingerprint Database Management System", International Journal of Engineering Research and Technology (IJERT), AAMT-2013, pp. 21-23, ISSN: 2278-0181, March-2013. **Impact Factor:1.76**
24. G.Chinavenkateswararao, **M.Kamaraju**, "Low Power Instruction Set Architecture for Aircraft Applications using Clock Gating Technique," International Journal of Systems , Algorithms & Applications, Volume 3, Issue ICASE13, April 2013, (ISSN Online: 2277-2677), pp 25-28
25. **M.Kamaraju**, P.V.SubbaRao and T.Venkata Lakshmi, "A NOVEL VOTING SYSTEM USING SMS,"International journal of Computer Science & Information Technology (CS & IT) (DOI : 10.5121/csit.2013.3634), August 2013, pp. 297–303.
26. **M.Kamaraju**, D.Gopinath, "Development of Embedded Web Server Based on DAC System Using ARM for Industrial Applications" International Journal of Computers & Technology (ISSN 22773061), Vol 10, No 4, A u g 1 5 , 2 0 1 3, pp 1496-1502
27. U.Siva Reddy, B.Rajasekhar, **M.Kamaraju**, B.Ananda Krishna "Novel Implementation of Employee Fingerprint Database Management System" at International Journal of Engineering & Science Research (IJESR), Vol.3, Issue.10, ISSN:2277-2685, October 2013, pp:4799-4808. **Impact factor:1.4. UGC Approved Journal.**
28. K. Eswar Kumar, **M.Kamaraju**, Ashok Kumar Yadav, "Porting and BSP Customization of Linux on ARM Platform," International Journal of Computer Applications (0975 – 8887) Volume 80, No 15, October 2013, pp 36-42.
29. **M.Kamaraju**, Jayaraju. D, " FPGA based 70MHz Digital Receiver for RADAR Applications,"International journal of Research in Electronics & Communication Engineering, Vol.1, issue 1, July- September 2013, pp 65-71.
30. **M.Kamaraju**, G.Chinavenkateswararao, , "Low Power Reduced Instruction Set Architecture using Clock Gating Technique," International Journal of VLSI Design and Communication

- Systems(VLSICS), Volume 4 , Issue 5, October 2013, (DOI : 10.5121/vlsic.2013.4503), pp35- 51.
31. V. Krishna Kumari, Y. Sri Chakrapani, **M.Kamaraju**, “Design and Characterization of Koggestone, Sparse Koggestone, Spanning Tree, Brentkung Adders,” International Journal of Scientific & Engineering Research, Volume 4, Issue 10, October-2013, (ISSN 2229-5518), pp 1502-1506.
  32. M.Kranthi Kumar, **M.Kamaraju** , K.Ramanjaneyulu, “Digital Fingerprinting In Encrypted Domain,” International Journal of Computer & Technology, Vol 12, No.1, December 2013, pp 3138-3146
  33. V.G.K Reshma, Lakshmi.T, **M.Kamaraju**,” A Novel Approach of Fiber Channel Switch for Avionics Applications,” International Journal of Engineering Science Invention [ISSN (Online): 2319 – 6734, ISSN (Print): 2319 – 6726], Volume 2, Issue 12, December 2013, pp.84-92 .
  34. S.Venkata Kishore, Y.Sri Chakrapani, **M.Kamaraju**, “ Design and Implementation of High Speed Data Transmission over Dual Independent Aurora Channels on One GTX dual tile using Virtex-5 FPGA”, International Journal of Scientific & Engineering Research, Volume 4, Issue 12, December-2013.
  35. **M.Kamaraju**, P.Anil Kumar “Wireless fingerprint attendance management system”, Journal of information assurance and security, vol.9, ISSN:1554:1010, pp-138-147, 2014.
  36. B.Kranthi, B.Ananda Krishna, **M.Kamaraju**, B.Rajasekhar “Enhanced Image Compression Algorithm for Image Processing Applications” International Journal of Computer Science and Information Technologies(IJCSIT), Vol.5(2), ISSN:0975-9646, 2014, pp:1509-1515. **Impact factor: 2.94**
  37. **M.Kamaraju**, K.Rama Krishna K.Ramanjaneyulu, “A Novel Adaptive Beam forming RLMS Algorithm for Smart Antenna System,” International Journal of Computer Applications (0975 – 8887), Volume 86 – No 5, January 2014, pp 27-32
  38. Y.SriChakrapani, **M.Kamaraju**, K.Sindhu “FPGA Implementation of Irrigation control system”, International Journal of Scientific and Engineering Research, Vol.5, Issue.12, PP:1361-1364 Dec 2014. Impact Factor:3.2
  39. Y.SriChakrapani, **M.Kamaraju**, M.Aparna “FPGA Implementation of an Agricultural Management system using wireless networks”, International Journal of Computer Applications, Vol.105, Issue.18, PP:38-42, ISSN:0975-8887, Nov 2014. Impact Factor:0.715
  40. **M.Kamaraju**, P.VenkataSubbaRao, ”Power optimized hybrid application Specific Instruction Controller (ASIC)Processor Employing Clock gating Technique”, International Journal of Embedded Systems, Vol.1, pp 1-4, Feb 2015.
  41. **M.Kamaraju**, Y. Sri Chakrapani, “Design and Implementation of Low Power, Light Weight Cryptographic Core using Hummingbird2 Algorithm”, International Journal of scientific Engineering and Technology Research (IJSETR), Volume No: 4 Issue No: 35, ISSN:2319-8885, pp: 30-33, August-2015. Impact Factor:3.762
  42. A. Haritha, Y.Bhavani Prasad, **M.Kamaraju**, T.Venkata Lakshmi “Analysis of Memristor Effects with and without Temperature Effects”, International Journal of Applied Engineering Research, Volume No: 10 Issue No: 20, ISSN:0973-4562, pp:41464-41470, October, 2015.

43. **M.Kamaraju**, T.Subhashini, "Power efficient convolution using modulo multipliers", International Journal of Applied Engineering and Research, Volume No: 10, Issue No: 21, ISSN: 0973-4562, pp. no: 42581-42587, November, 2015. Peer reviewed,scopus
44. T.Subhasini, **M.Kamaraju**, "A Novel Multimodel Medical Image Fusion Approach Based on Phase congruency and Directive Contrast in NSCT Domain", International Journal of Computer Applications, Volume No: 129, Issue No: 10, ISSN: 0975-8887, pp.no:30-35, November, 2015.Impact Factor:0.867.
45. T.Subhashini, **M.Kamaraju**, "Power Optimized Datapath units of Hybrid Embedded Controller Architecture," International Journal of VLSI Design and Communication Systems (DOI : 10.5121/vlsic.2015.6604) , December 2015, vol.6, No.6, pp: 33-43
46. A.Venkata Suresh, P.Anil Kumar, **M.Kamaraju** "Reconfigurable Low Power FPGA Design With Low Density", International Journal of Innovative Research In Advanced Technology, ISSN:2319-1467, Volume-2,Issue-12,December,2015. Impact Factor:2.614.
47. T.Venkata Lakshmi, **M.Kamaraju** "A low power delay buffer using ring counter and gated driver tree", International Journal of Engineering Science and Research, Volume No: 05 Issue No: 12, ISSN: 2277-2685, pp. no: 1447-1455,December, 2015,Impact Factor:3.47.
48. R. Chandrasekhar, **M.Kamaraju**, K. Rushendra Babu, B. Ajay Kumar, "Optimization of Peak to Average Power Ratio Reduction Using Novel Code for OFDM Systems" Microelectronics, Electromagnetics and Telecommunications, Lecture Notes in Electrical Engineering 372(Springer), DOI 10.1007/978-81-322-2728-1\_24, pp:267-275,2016
49. A. Ramakrishna Raju, N. Samba Murthy, **M.Kamaraju**, "FPGA Implementation of CORDIC Multiplier based Redundant Floating-point Butterfly Architecture for Signal Processing Applications", International Advanced Research Journal in Science, Engineering and Technology, ISSN (Online) 2393-8021 Vol. 3, Issue 7,pp:138-142, July 2016
50. N. Sowjanya, B. Rajasekhar, **M. Kamaraju**, "FPGA Implementation of Emotion Recognition from Speech Signals", International Journal on Electronics, Electrical and Computational Systems (IJEECS), vol.5, issue 7, ISSN: 2348-117X, July 2016, pp: 10-14. **Impact factor: 2.52**
51. M. A. Majeed, B. Vamsi Krishna, **M.Kama Raju** , "A real time control and monitoring system using ZynqSoC FPGA based web server", International Journal of Engineering Sciences and Technology, Vol.5, Issue.8, pp:388-398, August, 2016 Impact Factor:4.116
52. K.Sai Kumar, Y Sri Chakrapani, **M.Kamaraju**, Implementation of Low Power Ultrasonic Phased Array Using ZYNQ-SoC IRACST - International Journal of Computer Science and Information Technology & Security (IJCSITS), ISSN: 2249-9555, Vol.6, No4, pp:26-32, July-August 2016 Impact Factor:3.765, Scopus
53. T.Subhashini, **M.Kamaraju**, K.Babulu, "Programmable core processor using data driven clock gating", International Journal for Modern Trends in Science and Technology(IJMTST), Volume 2 ,Special Issue 1,ISSN:2455-3778,pp:196-203,October,2016 Impact Factor:2.175
54. G.Rajesh,T.Venkata Lakshmi, **M.Kamaraju**, "Low Power VLSI implementation of error detection and correction codes using OLS codes" International Journal of Computer Science and Information Technology & Security (IJCSITS), ISSN: 2249-9555 Vol.6, No.4, July-August 2016.Impact Factor:3.765
55. N.Sambamurthy, **M.Kamaraju**, "FPGA Implementation of Low Power FM0/Manchester Encoding and Decoding Schemes for DSRC Transceiver Applications", Annual Technical Volume of ETEB, Institute of Engineers (India), Theme: Design of Circuits and Systems for Signal, Image and Video Processing, vol. 1, pp. 52-59, 2016.

56. T.Subashini, K.Babulu, **M.Kamaraju**, "Low Power Programmable Processor Core(LPPPC) Architecture Using Clock Gating Technique", Annual Technical Volume of ETEB, Institute of Engineers (India), Theme: Design of Circuits and Systems for Signal, Image and Video Processing, vol. 1, pp. 59-61, 2016.
57. A. Venkateswararao, N. Sambamurthy **M.Kamaraju**, "Power optimized CODEC for DSRC applications," International Journal of Applied Engineering Research, Volume No: 10 Issue No: 20, ISSN:0973-4562, pp 41483-41489
58. N. Sowjanya, B.Rajasekhar, **M.Kamaraju**, "FPGA Implementation of Emotion Recognition from Speech Signals," International Journal of Electronics, Electrical and Computational System IJEECS ISSN 2348-117X Volume 5, Issue 7 July 2016, pp 10-14
59. K. Sarat Chandra, B. Rajasekhar, **M. Kamaraju**, "Enhancing the Accuracy of Emotion Recognition Using Emotion-Specific Features", International Journal of Electronics, Electrical and Computational System (IJEECS), ISSN 2348-117X, Volume 6, Issue 5 May 2017, pp: 344-346. **Impact factor: 2.52**
60. J. Naga Surekha , Sri Chakrapani , **M.Kamaraju**, " Implementation of High Performance Speeded Up Robust features Detection," International Journal of Scientific & Engineering Research Volume 8, Issue 5, May-2017, pp 1249-1251
61. Rohith Bala Jaswanth B, V. V. K. D.V. Prasad, **M.Kamaraju**, "A Survey Of Operational Transconductance Amplifier And Its Techniques In Cmos Technology," International Journal of Advance Engineering and Research Development, *Volume 4, Issue 12, December -2017, pp 145-151*
62. **M. Kamaraju**, D. Ramya Krishna, T. Subhashini, "Implementation of A Wallace Tree Approach for Data Aggregation in Wireless Sensor Nodes on ZED board and Send that Aggregated Data to the Sink through WSN Master Development Board(IOT)" International Journal for Research in Engineering Application & Management (IJREAM) ISSN : 2454-9150, IMC18405, Jan 2018, pp 278-287
63. P.Indira and **M.Kamaraju**, "A Low Power Hamming Code Based Controller with Splitting Logic Built-in Self Test Scheme," International Journal of Applied Engineering Research ISSN 0973-4562 Volume 13, Number 5 (2018) pp. 2669-2679
64. G. Chinavenkateswararao, **M.Kamaraju** and P.V. Subbarao, "Design And Implementation Of Cache Memory Using Cmos Transistors," Ictact Journal On Microelectronics, July 2018, Volume: 04, ISSUE: 02, pp 576-583
65. Bhavani Prasad, **Kamaraju Maddu**, and Venkata Lakshmi, "Mathematical Modelling and Analysis of Memristors with and without its Temperature Effects," Intl Journal of Electronics And Telecommunications, 2017, VOL. 63, NO. 2, PP. 181-186.
66. Pallavi Sesham, Venkatalakshmi Thota, **Kamaraju M**, "Design Of Kogge-Stone Adder Using Adiabatic Logic", International Journal of Advances in Electronics and Computer Science, ISSN: 2393-2835 Volume-5, Issue-6, Jun.-2018
67. Y. Mamillu, Y. Sri Chakrapani , **M.Kamaraju**," FPGA Implementation of Integral Image generator in SURF detector," International Journal Of Electronics Engineering (ISSN:: 0973-7383) Volume 10 • Issue 2 pp.. 233-240 June 2018-Dec 2018, pp 2333-240.
68. S.Pallavi, T.Venkata Lakshmi, **M. Kamaraju**, "Implementation and comparative analysis of Carry Select Adder using Kogge-Stone Adder in Adiabatic logic" Journal of Engineering

- Research and Application, UGC approved Journal Research article, ISSN : 2248-9622, Vol. 8, Issue 6 (Part - III) June 2018, pp 22-26.
69. T.Subhashini, **M.Kamaraju**, K.Babulu, "A Novel Test Programs for Hybrid RISC Controller," Springer **Lecture Notes in Electrical Engineering** book series (LNEE, volume 521), **Microelectronics, Electromagnetics and Telecommunications**, November 2018, DOI: [https://doi.org/10.1007/978-981-13-1906-8\\_57](https://doi.org/10.1007/978-981-13-1906-8_57), Publisher Name: Springer, Singapore, pp 559-565
  70. Y. Mamillu, Y. Sri Chakrapani, **M. Kamaraju**, "FPGA Implementation of Integral Image generator in SURF detector", *International Journal of Electronics Engineering*, Volume 10, Issue 2, pp.233-240, June 2018.
  71. G Chinavenkateswararao, **M Kamaraju**, P V Subbarao, "Design And Implementation Of Cache Memory Using Cmos Transistors", *ICTACT Journal on Microelectronics*, ISSN 2395-1680, Volume 4, Issue 2, pp: 576-583, July 2018.
  72. P. Indira, Ved Vyas Dwivedi, **M. Kamaraju**, "Design and Optimization of Low Power VLSI Circuits for Leakage Power Reduction Using GSA", *IOSR Journal of VLSI and Signal Processing (IOSR-JVSP)* Volume 8, Number 6, Ver. I (2018), pp 56-66.
  73. T. Subhashini, M. Kamaraju, K. Babulu, "A New ALU Design using PNS-FCR: Static CMOS Logic for Microprocessors," *International Journal of Engineering and Advanced Technology (IJEAT)* ISSN: 2249 – 8958, Volume-8, Issue-6S2, August 2019, pp 876-882
  74. N. Sambamurthy, M. Kamaraju, "FPGA Based Optimized Reconfigurable Base-2 Constant Coefficient Multiplier Architecture for Image Filtering," *International Journal of Engineering and Advanced Technology (IJEAT)* ISSN: 2249 – 8958, Volume-8, Issue-6S2, August 2019, pp 822-825
  75. P. Indira, M. Kamaraju, " Design and Implementation of 6-Stage 64-bit MIPS Pipelined Architecture," *International Journal of Engineering and Advanced Technology (IJEAT)* ISSN: 2249 – 8958, Volume-8, Issue-6S2, August 2019, pp 790-796.
  76. B. Lakshmi, M. Kamaraju, K.Babulu, "Subthreshold Region based Linear Feedback Shift Register," *International Journal of Engineering and Advanced Technology (IJEAT)* ISSN: 2249 – 8958, Volume-8, Issue-6S2, August 2019, pp 817-821
  77. B. Rajasekhar, M. Kamaraju, V. Sumalatha, "Glowworm Swarm based Fuzzy classifier with Dual Features for Speech Emotion Recognition", *Evolutionary Intelligence*, Springer Journal, ISSN 1864-5909, 16 July 2019, DOI 10.1007/s12065-019-00262-1, **Impact Factor: 0.94, SJR: 0.222, H-Index: 19, Scopus Indexed .**
  78. B. Rajasekhar, M. Kamaraju, V. Sumalath, "Speaker Independent Emotion Recognition From Speech Signals", *ARPN Journal of Engineering and Applied Sciences*, ISSN: 1819-6608, Vol. 13, No. 9, May 2018, pp: 3188-3191. **SJR: 0.19, H-Index: 17, Scopus Indexed.**
  79. P.Indira, **M.Kamaraju**, " High Performance 6-stage MIPS RISC Pipelined Processor Architecture, " *International Journal of Engineering Research and Applications (IJERA)*, ISSN: 2248-9622; Jan 2019, Vol. 9, Issue 1 (Series -I) pp 17-23.
  80. P.Indira, **M.Kamaraju**, " Implementation and Analysis of 32-bit pipelined RISC Processor Architecture", *Journal of VLSI Design tools and Technology (JOVDTT)* ISSN: 2321-6492,(Accepted)
  81. P.Indira, **M.Kamaraju**, " Verilog Implementation of a MIPS RISC 32-bit Pipelined Processor Architecture," *IOSR Journal of Electronics and Communication Engineering (IOSR-JECE)* , Vol. 7. Issue 1
  82. P.Indira, **M.Kamaraju**, " Low power flip-flop design using tri-state inverter logic, " *Journal of Low Power Electronics*, March 2019, Vol.15, No.1, web of science.
  83. V.Prasanth, K.Babulu, M.Kamaraju, "Dynamic Power Optimization of 32 Bit MIPS Processor Using Clock Gating For Low Power Applications," *International Journal of Recent Technology and Engineering (IJRTE)* ISSN: 2277-3878, Volume-8 Issue-2, July 2019, pp 5936-5942
  84. Rohith Bala Jaswanth B, V.V.K.D.V.Prasad, M.Kamaraju, "Design of Three Stage Cascaded Operational Transconductance Amplifier for ECG Applications", *Multimedia Tools & Applications-*



Springer, DOI:10.1007/s11042-018-6873-9, Accepted: 8 November 2018, [Impact factor-1.541, Springer, SCi Indexed, 45 H index, Springer Nature 2018]

85. Rohith Bala Jaswanth B, V.V.K.D.V.Prasad, M.Kamaraju, "Impact on Gain and Noise : ECG Amplifier & Comb Filter Design using OTA", International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, Volume-8, Issue-6S2, August 2019, [ Impact factor-5.97, Scopus indexed, DOI:10.35940/ijeat.F1203.0886S219]
86. Rohith Bala Jaswanth B, V.V.K.D.V.Prasad, M.Kamaraju, " Design of operational transconductance amplifier(OTA) using heterogeneous avalanche voltage changeover circuit ," Journal of Advanced Research in Dynamical and Control systems,
87. B. Rajasekhar, M. Kamaraju, V. Sumalath, "A Novel Speech Emotion Recognition Model using Mean Update of Particle Swarm and Whale optimization-based Deep Belief Network" Journal of Data Technologies and Applications, SSCI journal (ISSN: 2514-9288),

#### **NATIONAL/INTERNATIONAL CONFERENCES: 67**

88. **M.Kamaraju**, A.V.N.Tilak, M.V.Ganeswararao, "Low Power ALU for High Performance Systems" Proceedings of National Conference on Advanced Communication Technologies [ACT – 06], 8-9 December 2006 pp 150 – 152.
89. **M.Kamaraju**, A.V.N.Tilak, G.N.Swamy, "Embedded System for Remote Control Observation" Proc. of IETE Zonal Seminar on Emerging and Converging Communication Technologies, 10-11 February 2007 pp 22-24.
90. **M.Kamaraju**, A.V.N.Tilak, K.Lalkishore, "VHDL Implementation and Verification of ARINC – 429 core" Proceedings of National Conference on Modeling, Analysis and Simulation of Computers and Telecommunication Systems [MASCOT'07], 1-2 March 2007 pp 425 – 431.
91. **M.Kamaraju**, A.V.N.Tilak, K.Lalkishore, "Programmable Digital Clock Generator (PDCG) for Low Power Microcontroller" Proceedings of National Conference on Emerging Trends in Electronics & Communication – 2007 [NCE-merge'07], 23<sup>rd</sup> June 2007 pp 1-6.
92. B. Surekha, G.N.Swamy, **M.Kamaraju**, A.V.N.Tilak, "MATLAB IMPLEMENTATION OF AES -128 ALGORITHM FOR SECURE IMAGE TRANSFER" Proceedings of International Conference on Modeling and Simulation Coimbatore, 27-29 August 2007 pp 1-6
93. **M.Kamaraju**, A.V.N.Tilak, K.Lalkishore, "Low power Embedded Chip (LPEC) for Multiple Sensor applications" Proceedings of National Conference on Emerging Trends in Electrical Engineering for Sustainable Development, 24-26 November, 2008 pp 136-139.
94. **M.Kamaraju**, G.N.Swamy, B.V.S.L.Bharathi, "Embedded system for Electrical substation" Proceedings of National Conference on Emerging Trends in Electrical Engineering for Sustainable Development, 24-26 November, 2008 pp 132- 135
95. **M.Kamaraju**, A.V.N.Tilak, K.Lalkishore, "Low Power Programmable Embedded Controller Design" Proceedings of International Conference on Advances in Optoelectronics, Information and Communication Technologies (ICOICT 2009) , 26-27 February 2009 pp 397 – 399
96. **M.Kamaraju**, B.V.S.L.Bharathi, Y.Syamala, "Remote Observation and Control System for Military Surveillance" Proceedings of International Conference on Advances in Optoelectronics, Information and Communication Technologies (ICOICT 2009) , 26-27 February 2009 pp 659 – 662.

97. **M.Kamaraju**, A.V.N.Tilak, G.N.Swamy, "Role of Visual aids in Teaching and Learning Process" Proceedings of National Conference on "Learning Enhancement Through Information and Communication Technology", 21-22 November 2009 pp 126-130.
98. B.Ravi,G.N.Swamy,**M.Kamaraju**, "Design of Frame Synchronizer using Verilog HDL" Proceedings of National Conference on Advances in Signal Processing (NCASP – 09),20- 21 November 2009 pp 79 - 82.
99. S.RatnaSatyaKishore,**M.Kamaraju**,Y.Syamala , "FPGA Implementation of Digital Time Slot Interchanger (DTSI)" Proceedings of National Conference on Advances in Signal Processing (NCASP – 09) ,20-21 November 2009 pp 125 - 128.
100. V.VittalReddy,**M.Kamaraju**,K.VidhyaSmitha, "Teaching Methodology – Newton and Galileo" Proceedings of National Conference on "Learning Enhancement Through Information and Communication Technology", 21-22 November 2009 pp 61- 67.
101. **M.Kamaraju**, A.V.N.Tilak, K.Lalkishore, "A Clock Gating Circuit for GALS Systems" Proceedings of International Conference on Emerging Trends in Signal Processing & VLSI Design (SPVL – 2010),11-13 June 2010 pp
102. Ch.Sowjanya,**M.Kamaraju**,Y.Syamala, "Design and ASIC Implementation of Root Raised Cosine Filter" Proceedings of International Conference on Emerging Trends in Signal Processing & VLSI Design(SPVL – 2010), 11-13 June 2010 pp
103. **M.Kamaraju**,A.V.N.Tilak,K.Lalkishore, "FPGA Implementation of OFDM Transmitter Employing Clock Gating Technique" Proceedings of International Conference on Emerging Trends in Signal Processing & VLSI Design(SPVL – 2010), ,11-13 June 2010 pp
104. **M.Kamaraju**, M.Vijayakumar,"FPGA Implementation of Instruction Set Architecture (ISA) Core for Serial Data Packetization" Proc.of2<sup>nd</sup> International Conference on Computer Science and Information Technology(CSIT 2011),New Delhi, during06<sup>th</sup>-07<sup>th</sup>, November, 2011.
105. **M.Kamaraju**,K.Lal Kishore, A.V.N.Tilak, "FPGA Implementation and verification of ARNIC core," Journal of arXiv.org (e print archive), vol.1109,Nov, 2011.
106. M.Vijayakumar, **M.Kamaraju**, " FPGA Implementation of Instruction set architecture(ISA) for sensor data pakatization," Proc.of2<sup>nd</sup> International Conference on Computer Science and Information Technology(CSIT 2011), November 2011, pp 56-60
107. **M.Kamaraju**,M.Alekhya,V.Swathi,N.Sambamurthy,P.Pavan, "An Intelligent Embedded System for Distributed Electrical Appliances (IESDEA)," Proc.of National conference (NCETEC-2K11), December 2011, pp 101-103.
108. **M.Kamaraju**, N.Sambamurthy, "FPGA Implementation of Multiprocessor Core Architecture For Embedded Concurrent Computing," Proc.of National conference on Advances in Communication Technologies (NCACT'12) ,9-10 January 2012, pp 463-466.
109. **M.Kamaraju** and S.Bhavani, "Speech Enhancement Technique Using Eigen Values", at International Conference on Electronics, Communications and Information Systems, November 2012, pp 46-52.
110. **M.Kamaraju** and M.Alekhya, "A Novel Implementation Of 32 bit VLIW-MISC Processor On FPGA", Proc. of International Conference on Electrical Engineering and Computer Science (ICEECS), Singapore,5<sup>th</sup> December 2012.
111. **M.Kamaraju**, P.V.SubbaRao, T.Venkata Lakshmi "A Novel Implementation of Voting System using SMS" Proc.ofInternational Conference on Signal, Image Processing and Pattern Recognition (SIPP-2013) at Bangalore during 18-19 February 2013.
112. G.China Venkateswara Rao, **M.Kamaraju** "Low Power Instruction set Architecture for Aircraft Applications using Clock Gating Technique" Proc.of2<sup>nd</sup> International Conference on Applied Sciences and Engineering (ICASE 2013) on 31<sup>st</sup> March 2013, Hyderabad, India.

113. D.Gopinath, **M.Kamaraju**, "Review of Embedded Web Server Based on DAC System" Proc.of International Conference on Advanced Engineering & Technology(ICACSIT), Chennai on 10<sup>th</sup> March 2013, pp:162-165
114. **M.Kamaraju**, B.Ananda Krishna, B.Rajasekhar, P.Anil Kumar, "A Novel Implementation of Fingerprint Recognition System using DSP Processor", Proc.of National Conference on Advance Assistive and Main Stream Technologies for Persons with Special Needs at Sri Vishnu Engineering College for Women, Bhimavaram, during 5-7, pp.1-4, March 2013.
115. **M.Kamaraju**, "Review of Embedded Web Server Based on DAC System" Proc.of International Conference on Advanced Engineering & Technology(ICACSIT), Chennai, on 10<sup>th</sup> March 2013, PP:162-165
116. B.Ananda Krishna, **M.Kamaraju**, B.Rajasekhar, B.Kranthi, "Enhanced SPIHT Algorithm for Image Compression", National Conference on Advance Assistive and Main Stream Technologies for Persons with Special Needs at Sri Vishnu Engineering College for Women, Bhimavaram, during 5-7, pp.1-4, March 2013.
117. B.Rajasekhar, **M.Kamaraju**, B.Ananda Krishna, U.Siva Reddy, "Fingerprint Database Management System", Proc. of National Conference on Advance Assistive and Main Stream Technologies for Persons with Special Needs at Sri Vishnu Engineering College for Women, Bhimavaram, during 5-7, pp.1-4, March 2013.
118. U.Siva Reddy, B.RajaSekhar, **M.Kamaraju**, B.Ananda Krishna "Fingerprint Database Management System". Proc. of National Conference on Advance Assistive and Main Stream Technologies for Persons with Special Needs, Bhimavaram, during 5-7 March 2013.
119. **M.Kamaraju**, P.V.SubbaRao, T.Venkata Lakshmi "A Novel Implementation of Voting System using SMS" Proc. of International Conference on Signal, Image Processing and Pattern Recognition (SIPP-2013) at Bangalore during 18-19 February 2013.
120. **M.Kamaraju** "Low Power Instruction set Architecture for Aircraft Applications using Clock Gating Technique" Proc.of 2<sup>nd</sup> International Conference on Applied Sciences and Engineering (ICASE 2013) on 31<sup>st</sup> March 2013, Hyderabad, India.
121. **M.Kamaraju**, M.Alekya, K.Lal Kishore "A Novel Implementation of 32-bit VLIW-MISC Microprocessor on FPGA" Proc.of 3<sup>rd</sup> International Conference on RF and Signal Processing Systems (RSPS-2013), at KL University, 26 – 27 July 2013.
122. **M.Kamaraju**, P.Anil Kumar, B.Ananda Krishna, B.Rajasekhar," Embedded Fingerprint Recognition System," Proc.of International Conference on Recent Researches in Telecommunications, Informatics, Electronics and Signal Processing, (ISBN: 978-960-474-330-8),17-19 September 2013, Baltimore, MD,USA, pp 394 – 401.
123. **Maddu Kamaraju**, Penta Anil Kumar "DSP based Embedded Finger Print Recognition System", Proc.of 13th International Conference on Hybrid Intelligent Systems (HIS) (ISBN: 978-1-4799-2439-4/13), December 2013 at Tunisia, pp 6-11.
124. **M.Kamaraju**, N.Sambamurthy ,K.Lalkishore, " FPGA implementation of multiprocessor core architecture for concurrent computing with multichannel UART," Proc. of National Conference NCIET 2013 (ISBN: 978-1-4276-5484-7), December 2013, pp 309-315
125. **M.Kamaraju**, K.J.Varalakshmi, " NIOS Ili processor based standard and custom peripheral design," Proc. of National Conference NCIET 2013 ISBN: 978-1-4276-5484-7, December 2013, pp 321-326.
126. **M.Kamaraju**, Jayaraju.D, " Implementation of 70mhz digital receiver," Proceedings of National Conference NCIET 2013 (ISBN: 978-1-4276-5484-7), December 2013, pp 333-337
127. I.Sree Satya, **M.Kamaraju**, "Design and Implementation of Low Power Carry Bypass Multiplier," Proc. of National Conference NCIET 2013 (ISBN: 978-1-4276-5484-7), December 2013, pp 357-361.

128. **M.Kamaraju**, Shaik Parveen, "Development of Soft-Core processor system on FPGA," Proc.of 5<sup>th</sup> International Conference on Recent Trends in Information, Telecommunication and Computing (ITC2014), 21-22 March 2014.
129. **M.Kamaraju**, ShaikParveen, "Development of Soft-Core processor system on FPGA," Proc. of 5<sup>th</sup> International Conference on Recent Trends in Information, Telecommunication and Computing (ITC2014), 21-22 March 2014
130. **M.Kamaraju** and N.Sambamurthy , "FPGA implementation of Multi Processor core architecture for embedded concurrent computing", "IET digital library & Proc. of Fourth International Conference on Advances in Recent Technologies in Communication and Computing (ARTCom2012), 2012 p. 44 – 47 (DOI: 10.1049/cp.2012.2491, ISBN: 978-1-84919-929-2)
131. M.Aparna, Y.Sri Chakrapani, **M.Kamaraju**, " FPGA Implementation of an Agricultural Management System using Wireless Networks", National Conference On RF Wireless Communication & Signal Processing (NCRFWCSP) 2014, Department of Electronics and Communications Engineering, Bapatla Engineering College.
132. Y.Sri Chakrapani, **M.Kamaraju**, N.Venkateswara Rao, "FPGA Implementation low power UART", National Conference on RF Wireless Communication & Signal Processing (NCRFWCSP) 2014, Department of Electronics and Communications Engineering, Bapatla Engineering College.
133. **M.Kamaraju**, S.V.Kishore "Design and realization of CMOS circuits using dual integrated technique to reduce power dissipation", IEEE International conference on Signal Processing and Communication Engineering Systems(SPACES), K.L University, Guntur, pp:112-117,Jan-2015
134. **M.Kamaraju**, P.Anil Kumar, "Wireless fingerprint attendance management system" Proc.of IEEE International conference on Electrical, Computer and Communication Technologies (ICECCT), Coimbatore, ISBN:978-1-4799, PP:1-6March,2015.
135. R.ChandraSekhar, **M.Kamaraju**, M.V.Sai Ram, G.Tirumala Rao, " PAPR Reduction using the Combination of Precoding with Mu-Law Comanding Technique for MIMO-OFDM Systems", IEEE International Conference on Communication and Signal Processing (ICCSP), April 2015.
136. G.Sreelatha, B.Rajasekhar, **M.Kamaraju**, "A Robust and Reliable Gender Driven Emotion Recognition System", International Conference on Emerging Trends in Engineering and Technology, IFERP, Visakhaptnam, pp. 7-10, 30<sup>th</sup> August 2015.
137. **M.Kamaraju**, N.Sambamurthy,"Design and Implementation of Concurrent computing Multi Processor core architecture with Multi UART",Proc. of Electrical, Electronics, Signals, Communication and Optimization (EESCO), 2015 IEEE, International Conference ,PP476-501.
138. T.Subhashini, **M.Kamaraju**, "Programmable Hybrid Embedded Controller Architecture using Clock Gating Technique", IFERP International Conference, Hyderabad,ISBN:9788192958040,pp:55-59,January,2016.
139. B. Rajasekhar, **M. Kamaraju**, V. Sumalath, "Gender Driven Emotion Recognition System for Speech Signals Using Neural Networks", 6<sup>th</sup> International Advanced Computing Conference (IACC 2016) organized by IEEE Computer Society – Indian Council at S.R.K.R. Engineering College, Bhimavaram during Feb 27-28, 2016.

140. N. Sowjanya, B. Rajasekhar, **M. Kamaraju**, "FPGA Implementation of Emotion Recognition from Speech Signals", International Conference on Signal, Image, Video and Audio Processing (ICSIVA-16), organized by Conference Info and Academic Science at Acharya Nagarjuna University, Guntur on July 30, 2016.
141. B. Rajasekhar, **M. Kamaraju**, V. Sumalath, "FPGA Based Emotions Recognition from Speech Signals", IEEE sponsored 3<sup>rd</sup> International Conference on Biosignals, Images and Instrumentation organized by S.S.N. College of Engineering, Chennai during Mar 16-18, 2017.
142. T.Subhashini, **M.Kamaraju**, K.Babulu,"A Novel Implementation of Mixed ISA on FPGA" IEEE International Conference on Communication and Signal Processing (ICCSP),IEEE Xplorer Feb 2018, DOI: 10.1109/ICCSP.2017.8286387
143. T.Subhashini, **M.Kamaraju**, K.Babulu, "Design and Analysis of Multiple Port Memory Architecture for Low Power Applications," IEEE International Conference on Signal Processing and Communication Systems (SPACES 2018), IEEE Xplorer March 2018, DOI: 10.1109/SPACES.2018.8316348.
144. Ch.S.DayaAdarsh, T.Venkata Lakshmi, **M.Kamaraju** "Implementation and Comparative Analysis of Double Gate Low Power Multiplexers Using Dynamic Logic Styles", International Conference on Electronics, Communication and Aerospace Technology, ICECA 2017, IEEE Xplorer April 2018,**DOI**:10.1109/ICECA.2017.8212825
145. PallaviSesham, VenkatalakshmiThota, **Kamaraju M**, "Design Of Kogge-Stone Adder Using Adiabatic Logic", National Conference on Advances in Electrical, Electronics & Computer Engineering (NCAEECE)in association with IRAJ Research Forum and Institute of Research and journals (IRAJ), April 2018.
146. T.Subhashini, **M.Kamaraju**, K.Babulu, " A Novel ALU design using PNS-FCR: Static CMOS Logic for Microprocessors", in First International Conference on Computational and Intelligent Techniquesfor Automation of Engineering Systems (CITAES-2018), organized by Department of Electrical and Electronics Engineering and Department of Electronics and Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru during 30<sup>th</sup> November 2018 to 1<sup>st</sup> December 2018.
147. N.Sambamurthy, **M.Kamaraju**, " FPGA based optimized Reconfigurable Base-2 constant coefficient multiplier architecture for Image Filtering", Proc.of First International Conference on Computational and Intelligent Techniques for Automation of Engineering Systems (CITAES-2018), Gudlavalleru Engineering College, Gudlavalleru during 30<sup>th</sup> November 2018 to 1<sup>st</sup> December 2018.
148. **M.Kamaraju**, P Bujjibabu, K.Babulu "Design and Implementation of an efficient IIR Filter Architectures Using Merged Delay Transformation", Proc.of First International Conference on Computational and Intelligent Techniques for Automation of Engineering Systems (CITAES-2018), Gudlavalleru Engineering College, Gudlavalleru during 30<sup>th</sup> November 2018 to 1<sup>st</sup> December 2018.
149. **M.Kamaraju**, B.Laxmi, K.Babulu "Design and Implementation of Linear Feedback Shift Register in Subthreshold Region", Proc.of First International Conference on Computational and Intelligent Techniques for Automation of Engineering Systems (CITAES-2018),

Gudlavalleru Engineering College, Gudlavalleru during 30<sup>th</sup> November 2018 to 1<sup>st</sup> December 2018.

150. **M.Kamaraju**, P. Indira, Ved Vyas Dwivedi “Design and Implementation of 6-Stage 64-bit MIPS Pipelined Architecture”, Proc.of in First International Conference on Computational and Intelligent Techniques for Automation of Engineering Systems (CITAES-2018), Gudlavalleru Engineering College, Gudlavalleru during 30<sup>th</sup> November 2018 to 1<sup>st</sup> December 2018.
151. **M.Kamaraju**, P. Indira, “Low Power PVT robust area efficient pulse triggered Flip-Flop Design”, Proc. Of International Conference on Recent Innovations in Electrical, Electronics & Communication Engineering (ICRIEECE), KIIT, Bhubaneswar, July 27<sup>th</sup> – July 28<sup>th</sup> 2018, pp 138.
152. **M.Kamaraju**, P. Indira, “Gravitational Search Algorithm based Leakage Power optimized ALU Design”, Proc. Of International Conference on New Trends in engineering & Technology (ICNTET), GRT Institute of Engineering and Technology, Chennai, Sep 7<sup>th</sup> – Sep 8<sup>th</sup> 2018, pp 181.
153. **M.Kamaraju**, P. Indira, “Low leakage Power ALU Design using IVC based GSA”, Proc. of 2<sup>nd</sup> International conference on Innovative Research in Science, Technology & Management (ICIRSTM), UTown, National University of Singapore, Singapore, Sep 29<sup>th</sup> – Sep 30<sup>th</sup>, 2018.
154. B. Rajasekhar, M. Kamaraju, V. Sumalatha, “FPGA Based Recognition of Emotions from Speech Signals”, 2017 Third International Conference on Biosignals, Images and Instrumentation (ICBSII), **IEEE Xplore**: 26 Oct 2017, 10.1109/ICBSII.2017.8082290.
155. B. Rajasekhar, M. Kamaraju, V. Sumalatha, “Gender Driven Emotion Recognition System for Speech Signals Using Neural Networks”, proceedings of the 6<sup>th</sup> International Advanced Computing Conference (IACC 2016), IEEECS, Feb 2016, pp 31.

#### **PATENT:01**

156. Patent titled “INTELLIGENT CUSTOMER CARE CENTER “ filed on 27/12/2019 with Applicant Names B Rajasekhar, M. Kamaraju, V. Sumalatha and published in the journal of Intellectual Property India (IPR) on 10/01/2020 under Controller General of Patents, Designs and Trade Marks Department of Industrial Policy and Promotion Ministry of Commerce and Industry.

#### **SHORT TERM COURSES/CONFERENCES/WORKSHOPS ATTENDED:82**

1. A Three day state wide workshop on “Microcontrollers: The technology of Tomorrow” conducted by M.J.C.E.T, Hyderabad during 15-17 November 2001.

2. A Two week course on “Advanced Microprocessors” conducted by Intel & JNTU, Hyderabad during 3-13, December 2002
3. One day workshop on “Embedded System Design” conducted by IETE, Vijayawada on 3<sup>rd</sup> February 2002
4. Attended Quality Improvement program on “Instructional Design and Delivery” conducted by Technical Teachers Training Institute (TTTI) Chennai during 21-26, April 2003 at Gudlavalleru Engineering College, Gudlavalleru
5. Training program on “Embedded Systems” conducted by ESCI, Hyderabad during 28-29 November 2003.
6. Attended One week refresher course Course on “VLSI DESIGN & EMBEDDED SYSTEMS” at JNTU, Hyderabad conducted by Academic Staff College, JNTU, Kukatpally, Hyderabad during 25-30 October 2004.
7. Attended 18<sup>th</sup> International conference on “VLSI Design & 4<sup>th</sup> International Conference on Embedded System, conducted by VLSI Society of India, during 3-7 January 2005. (6& 7<sup>th</sup> January 2005)
8. Attended Training/Technical discussions at Qualcore Logic Ltd., Hyderabad during 6 – 7<sup>th</sup> September 2005.
9. Attended 19<sup>th</sup> International conference on VLSI design & 5<sup>th</sup> International conference on Embedded national systems, at Taj Krishna, Hyderabad during 3 – 7 January 2006 as a Fellow Ship Awardees Candidate.
10. Presented a paper titled “Low Power ALU for high performance Systems” at National Conference on advanced communication technology during 8-9 December 2006 organised by A.U.College of Engineering, Andhra University, Visakhapatnam,
11. Attended and presented paper, “Embedded System for Remote Control Observation” Zonal Seminar on Emerging and Converging Communication Technologies (SECT-07), A.U.College of Engineering, Visakhapatnam, during 10<sup>th</sup>& 11<sup>th</sup> February 2007.
12. Attended National Conference MASCOT-07, at Government College of Engineering, Salem, Tamilnadu, during 1-2 March 2007.
13. Attended and Presented a paper “Programmable Digital Clock Generator (PDCG) for Low Power Microcontroller” at National Conference (NC emerge’07), JNTU, Anantapur during 23<sup>rd</sup> June 2007.
14. Attended as Fellow Candidate in 21<sup>st</sup> International Conference on VLSI Design & 7<sup>th</sup> International Conference on Embedded Systems, at HICC, Hyderabad during 4 – 8 January 2008.
15. Attended and presented a paper a paper titled “Low Power Embedded Chip (LPEC 16) for Multiple Sensor Application” at National Conference during 24 -26 November 2008 organised by Electrical and Electronics Engineering Department, Gudlavalleru Engineering College, Gudlavalleru.
16. Attended and presented a paper titled “Embedded System for Electrical Sub-station” at National Conference during 24 -26 November 2008 organized by Electrical and Electronics Engineering Department, Gudlavalleru Engineering College, Gudlavalleru.
17. Presented a paper “Remote Observation & control system for military surveillance” at International Conference, ICOICT-2009 at SCT College of Engineering, Trivandrum during 26 - 27 February 2009.
18. Presented a paper “Low Power Programmable Embedded Controller” at International Conference, ICOICT-2009 at SCT College of Engineering, Trivandrum during 26 - 27 February 2009.urrent Trends in Biometrics” during 2-14, November, 2009 at GEC
19. Presented a paper titled “Design of Frame Synchronizer Using Verilog HDL” at National Conference Advances in Signal Processing (NCASP-09) during 20-21 November 2009 jointly organised by Dept. of Electronics and Communication Engineering, College of

- Engineering(Autonomous), Andhra University, Visakhapatnam, Blekinge Institute of Technology, Sweden & IETE, Visakhapatnam Centre
20. Presented a paper titled “FPGA Implementation of Digital Time slot Interchanger (DTSI)” at National Conference Advances in Signal Processing (NCASP-09) during 20-21 November 2009 jointly organised by Dept.of Electronics and Communication Engineering, College of Engineering(Autonomous), Andhra University, Visakhapatnam, Blekinge Institute of Technology, Sweden & IETE, Visakhapatnam Centre.
  21. Presented a paper titled “Role of visual aids in Teaching and Learning Process” at ISTE Fourth Annual Convention and Awards Function during 21-22 November 2009 organised by Gudlavalleru Engineering College, Gudlavalleru proceedings page No.126-130.
  22. Presented a paper titled “A Clock gating circuit for GALS System” at 1<sup>st</sup> International Conference. SPVL-2010 at Gurunanak Engineering College, Ibrahimpatnam, Hyderabad during 11 -13 June 2010.
  23. Attended one day interactive session on “Centre of excellence (VLSI): Mentor Graphics” at CoreEL Technologies, Hyderabad office with Mentor Graphics, Vice-President, USA on 27<sup>th</sup> September 2010.
  24. Attended as Judge of KIET FEST'10 at KIET, Kakinada for Paper & Creative poster making contest on 24<sup>th</sup> September 2010.
  25. Attended one day interactive session on “Centre of excellence (VLSI): Mentor Graphics” at CoreEL Technologies, Hyderabad office with Mentor Graphics, Vice-President, USA on 27<sup>th</sup> September 2010.
  26. Presented a paper entitled “Vehicle Navigation System using ARM Processors” in International Conference on VLSI & Signal Processing organized by ICVNSP -2011, Thailand, Hong kong during 27<sup>th</sup> – 28<sup>th</sup> May 2011.
  27. Acted as Chief Guest to the inauguration of ECE students Association “e-cratz” at Usha Rama College of Engineering, Telaproluon 2<sup>nd</sup> April 2011.
  28. One day visit to Efftronics as a part of Industry Institute Interaction.
  29. Presented a technical paper titled “a Novel implementation of Application specific Instruction set processor” co authored by Dr.K.Lal Kishore and Dr.A.V.N.Tilak at International Conference on Computer, Electrical, and Systems Sciences, and Engineering (ICCESSE 2011), Paris, France during 14-16 Nov 2011 and received appreciation certificate from the conference chair.
  30. Presented a technical paper titled “FPGA Implementation of Instruction Set Architecture (ISA) Core for Serial Data Packetization” at 2<sup>nd</sup> International Conference on Computer Science and Information Technology(CSIT 2011),New Delhi, during 06<sup>th</sup>-07<sup>th</sup>, November, 2011.
  31. Presented a paper titled “An Intelligent Embedded System for Distributed Electrical Appliances (IESDEA)” at National Conference on Emerging Technologies in Electronics and communications (NCETEC-2K11) Odalarevu, during 3-4 December 2011
  32. Presented a Paper at National Conference on Advances in Communication Technologies (NCACT'12) held at GITAM University Vizag during 9-10 January 2012.
  33. Presented a Paper at National Conference SANKETA -2012 on “ Emerging Trends in Communications & Signal Processing Techniques” held at SVUniversity Tirupati on 21<sup>st</sup> January 2012.
  34. Participated Conference on Advances in Communication , Navigation & Computer Networks (ACNCN -2012) held at Andhra University during 17-18 March 2012
  35. Participated a Two day ISTE workshop on Aakash for Education , conducted by IIT Bombay during 10-11 November 2012



36. Presented a paper titled "A Novel Implementation of 32-bit VLIW-MISC Processor on FPGA" at International Conference on Electrical Engineering and Computer Science ICEECS held at Singapore on 5<sup>th</sup> December 2012
37. Presented a paper "A Novel Implementation of 32-bit VLIW-MISC Microprocessor on FPGA" at 3<sup>rd</sup> International Conference on RF and Signal Processing Systems (RSPS-2013), at KL University, 26 – 27 July 2013.
38. Presented a paper "Low Power Instruction Set Architecture for Aircraft Applications using Clock gating Technique " at 2<sup>nd</sup> International Conference on " Applied Sciences and Engineering ICASE 2013 held at Hyderabad on 31<sup>st</sup> March 2013
39. Attended Two day training on " MATLAB, Simulink & Related Tool Boxes for engineering Education during 3-4 April 2013 held at GEC in collaboration with Academy of Design & Architecture.
40. Attended two day National workshop on " Advanced Signal Processing(NWASP'13)" At AUCOE(autonomous),Dept.of ECE, Andhra University during 30-31<sup>st</sup> August 2013.
41. Attended two week ISTE workshop on " Analog Electronics" conducted by IIT,Kharagpur during 4<sup>th</sup> – 14<sup>th</sup> June 2013.
42. Attended International Conference RSPS -2013 held at KL University during 26-27 July 2013.
43. Attended A two day National workshop on advances in Signal Processing NWASP- 13 held at Andhra University during 30-31 August 2013.
44. Attended one week refresher course on " Electronic Devices and Circuits" conducted by Dept.of ECE, Gudlavalleru Engineering College during September 2013.
45. Attended a Two day workshop on " Issues in Integrated Circuits (ICs) Design" held during 13-14 December 2013 at GEC
46. Attended a one week refresher course on " Electronic Devices and Circuits " held at GEC during 23-28 September 2013.
  
47. Attended A Two Week Workshop on Signals & Systems conducted at Gudlavalleru Engineering College in association with National Mission on Education through I.C.T (M.H.R.D, Government of India) under the governance of IIT, Kharagpur, with the support of Indian Society for Technical Education (ISTE) in on line mode during 2<sup>nd</sup> to -12<sup>th</sup> January 2014.
  
48. Attended a two day workshop on " Issues in IC Design" held at Dept. of ECE, Gudlavalleru Engineering College during 13-14 December 2013.
  
49. Attended three day workshop on "Theory and applications of Intelligent Signal Processing" held at Dept.of ECE, Gudlavalleru Engineering College during 28<sup>th</sup> February – 2 March 2014.
  
50. Attended international conference on "Innovation and Technology" in the field of science and Technology held at Universiti Teknologi Malaysia, Kuala Lumpur, Malaysia during 13 to 15 June 2015 organized by Malaysian Industrial Development Authority, Institution of Engineers Malaysia, Universiti Teknologi Malaysia, Kuala Lumpur. In this conference, discussed Traffic Control System, e-governance, e-commerce, renewable energy resources, manufacturing policies, role of professional bodies for the Technology Transform and Design & Development issues

51. Attended IEEE International conference on Signal Processing and Communication Engineering SPACES 2015 during 2-3 January 2015 at KL University , AP
52. Attended IEEE International conference on Electrical, Electronics, Signals, Communication and Optimization EESCO-2015 held at Vignans Institute of engineering Technology Signal during 24-25 January 2015.
53. Attended a One day workshop on “ Ultra Low Power Communication Using CC430 Microcontrollers :: Hands on Experience” on 7<sup>th</sup> February 2015 held at GEC
54. Attended 2015 IEEE International conference on Electrical , Computer and Communication Technologies IEEE ICECCT held at SVS College of Engineering , Coimbatore during 5-7 , March 2015.
55. Attended a Two day National Conference on” VLSI Design , Signal Processing, Image Processing Communications & Embedded Systems” held at JNTUK Kakinada during 6-7 November 2015
56. Presented a Technical paper at Springer International Conference on Micro Electronics, Electromagnetic and Tele Communications ICMEET 2015 held at GITAM University during 18-19 December 2015.
57. Attended a Three Days workshop on “Overview on latest Telecom Technologies”, Organized by BSNL Krishna SSA, on 11-13<sup>th</sup> January 2016.
58. Attended a National Conference on Computing , Electrical Electronics and Sustainable Energy Systems (NCCESES-2016) held at GIET , Rajahmundry during 6-7 October 2016
59. Participated in a Two Week ISTE STTP on “ CMOS , Mixed Signal and Radio Frequency VLSI Design “ conducted by IIT Khargapur from 30<sup>th</sup> January 2017 to 4<sup>th</sup> February, 2017 with very good grade
60. Attended a 32<sup>nd</sup> National Convention of Electronics and Telecommunication Engineers held at IE9I), Vijayawada during 24-25 October 2016 organized by IE(I) , AP Sate Centre
61. Attended and presented a Paper at 6<sup>th</sup> IEEE International Conference on Communication and Signal Processing at Adhiparasakthi Engineering college, Chennai during 6-8 April 2017.
62. Presented a Paper at International Conference on Electronics , Communication and aerospace Technology (ICECA 2017) held during 20-22 April 2017 at RVS Technical campus , Coimbatore.
63. Attended “Modern Pedagogy workshop” IIEECP Pre certification workshop, organized by Andhrapradesh State Skill Development Corporation, Vijayawada at KLU, Vaddeswarum during 31<sup>st</sup> July to 2<sup>nd</sup> August 2017.
64. Attended a two Day National Workshop on” Advances in Electronics and Communication Engineering (AECE-2017) held at Dept.of ECE, JNTUK Kakinada during 26-27 August 2017.

65. Attended National Level Training Program on “Advances in VLSI Design and Embedded Systems” during 06-11-2017 to 07-11-2017 at GEC.
66. Attended and presented a paper , “A Novel Implementation of Mixed ISA on FPGA” at IEEE International Conference on Communication and Signal Processing (ICCSP), Audhiparashakthi Engineering College, Chennai during 6-7 April 2017
67. Attended and Presented a paper “Design and Analysis of Multiple Port Memory Architecture for Low Power Applications”, at IEEE 2018 Conference on Signal Processing and Communication Engineering Systems (SPACES), 2<sup>nd</sup> January 2018.
68. Attended and Presented a Paper, “ Implementation of Wallace Tree Approach for Data Aggregation in wireless sensor nodes on Zed board” at International Multidisciplinary Conference IMC – 2018 during January 2018 organized by PVPSIT, Vijayawada
69. Attended one week National level online faculty development program on “Research challenges and Emerging Trends in Electronics and Communication Engineering”, organised by Ramachandra college of Engineering during 27<sup>th</sup> may to 1<sup>st</sup> june 2020.
70. Attended one week international online Knowledge development program on “Challenges And Advancements In The Design Of IOT, VLSI And Embedded Systems: A Researcher View”, organized by Department of Electronics and Communication Engineering of Gudlavalleru Engineering College during 8<sup>th</sup> to 13<sup>th</sup> june 2020.
71. Attended four days Online Course on “Examination Reforms”, organised by All India Council For Technical Education during 22<sup>nd</sup> to 25<sup>th</sup> april 2020.
72. Attended five days Online Certification Program on “Industrial IOT”, organised by Apply Volt during 19<sup>th</sup> to 23<sup>rd</sup> may 2020.
73. Participated in Global National Webinar Series on “Cyber Security”, organised by Department of Computer Science and Engineering, JNTUK University College of Engineering, Vizianagaram during 20<sup>th</sup> to 26<sup>th</sup> June 2020.
74. Attended a webinar on” Impact of Covid in Engineering Education and Way Forward”, organised by ISTE chapter, Gudlavalleru Engineering College on 9<sup>th</sup> june 2020.
75. Attended a webinar on “Radio frequency Measurements for cellular and wireless Communication Systems”, organised by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College on 25<sup>th</sup> may 2020.

76. Attended A National level on line Faculty Development Program on Research challenges and Emerging Trends in ECE organized by Dept.of ECE, Sri Ramachandra College of Engineering during 7<sup>th</sup> May 2020 to 1<sup>st</sup> June 2020.
77. Attended webinar on “ Impact of COVID in Engineering Education & Way forward “ organized by ISTE Chapter, GEC on 9<sup>th</sup> June 2020.
78. Attended 5 days on line certification Program on Industrial IoT held from 19<sup>th</sup> to 23<sup>rd</sup> of May 2020 organized by Apply Volt Company.
79. Attended AICTE STTP Phase I on “ Block Chain Architecture and Use cases” during 10-8-2020 to 15-8-2020 organized by Dept.of ECE , GEC.
80. Attended AICTE STTP Phase II on “ Block Chain Architecture and Use cases” during 17-8-2020 to 22-8-2020 organized by Dept.of ECE , GEC.
81. Attended AICTE STTP Phase III on “ Block Chain Architecture and Use cases” during 24-8-2020 to 29-8-2020 organized by Dept.of ECE , GEC.
82. Attended on line ICT Academy Virtual Book Launch of “Future of Higher Education-Nine Mega Trends “ on 20<sup>th</sup> June 2020 organized by ICT Academy.
83. Attended AICTE 4 days on line course on Examination Reforms “ conducted during 22-25 April 2020 organized by AICTE.
84. Participated a webinar on “ Project Management Body of Knowledge on 4<sup>th</sup> May 2020 organized by LBRCE, Mylavaram.
85. Participated Two week on line faculty Development Program on “ Embedded UVM open source Emulation & Functional Verification” jointly organized by Electronics and ICT Academies & IIT, Guwahati held from 13-24 July 2020.
86. Participated in the webinar “ Effective ways of Writing research Article” organized by SRM University –AP held on 25<sup>th</sup> Jul 2020.

**WORKSHOPS/PAPER CONTEST/COURSES/CONFERENCES ORGANIZED: 48**

1. One week course on “Instructional Design and Delivery” at Gudlavalleru Engineering College, as Chief Co-ordinator during
2. Two-day “National Level Student Technical Paper Contest GENECES-2K3 as a convener during 19-20 December 2003 held at Gudlavalleru Engineering College, Gudlavalleru.
3. Organized one day seminar on MEMS in the eve of Engineers day celebrations on behalf of ISTE student chapter, Gudlavalleru Engineering College, 2004.
4. A Five Day workshop on “DSP Processors” as a program co-ordinator at GEC, Gudlavalleru during 22-26 September 2005.
5. A two-day workshop on “VLSI Design” organized by Dept. of ECE, IEEE student chapter during 9-10 February 2007 as Chief Co-ordinator at GEC, Gudlavalleru.

6. A two day workshop on “Verilog Programming and Implementation” during 27-28 October 2007, organized by Dept. of ECE and IEEE student branch of Gudlavalleru Engineering College as Chief Co-ordinator.
7. A one-day “National Level Student Technical Paper Contest GENECES-2K9 on a convener during December 2009 held at GEC, Gudlavalleru.
8. Five day training program on “MENTOR GRAPHICS(FRONT END & BACK END ) and XILINX TOOLS” organized by Dept.of ECE in association with IETE, Vijayawada centre during 13-17, September 2010.
9. A Three Day Workshop on “VLSI Design Using EDA Tools” conducted by Dept. of ECE, Gudlavalleru Engineering College, during 2-4 December 2010 as Chief Co-ordinator
10. A one-day “National Level Student Technical Paper Contest GENECES-2K10as a convener during December 2010 held at GEC, Gudlavalleru as part of GECFEST.
11. One day workshop on “Analog, Digital, Mixed Signal VLSI Design” organized by Dept. of ECE, ISTE Student Chapter of Gudlavalleru Engineering College, on 15<sup>th</sup> October 2011, as Co-ordinator.
12. One week Refresher Course on “Pulse and Digital Circuits: Theory and Lab Practice” conducted by Dept. of ECE, Gudlavalleru Engineering College, during 21-26 November 2011 as Chief Co-ordinator.
13. National Conference on “VLSI, Signal Processing and Communication” VSCOM'12 organized by Dept. of ECE, Vignan Institute of Technology, Vignan University, Guntur during 10-11 February 2012 at a Program Committee Member.
14. A one-day “National Level Student Technical Paper Contest GENECES-2K12as a convener during February 2012 held at GEC, Gudlavalleru as part of GECFEST
15. Faculty Development program on “ VLSI and Embedded System Design” organized by Dept.ofECE and IETE, Vijayawada centre at Gudlavalleru engineering College during 7-8 July 2012 as Chief coordinator
16. A two day workshop on “Microwave Engineering Concepts and Lab Practice” organized by dept. of ECE, Gudlavalleru Engineering College during 9-10 June 2012 as Chief coordinator.
17. Faculty development program on “ VLSI and Embedded System Design” organized by Dept.of ECE in association with IETE, Vijayawada centre during 7-8 July 2012 as chief coordinator
18. A two day workshop on “Digital Image Processing and Lab Practice” organized by dept. of ECE, in association with ISF, Gudlavalleru Engineering College during 27-28 July 2012 as Chief coordinator.
19. A two day workshop on “PCB Design of Electronic Circuits (Hands on experience) ” organized by dept. of ECE, in Association with ECSAt,Gudlavalleru Engineering College during6-7August 2012 as Chief coordinator.
20. Presented a paper entitled “Implementation of Low Power Frame Synchronizer and code Group Detector for 3G Asynchronous W-CDMA system on FPGA” International Journal of VLSI & Signal Processing Applications, Vol.2, Issue.5, ISSN 2231-3133, pp:403-408
21. Attended Board of Studies (BOS) meeting at JNTUK, Kakinada as a Member of BOS (ECE) during 8 – 10 March 2013.
22. Attended International Conference on Advanced Engineering & Technology(ICACSIT), Chennai on 10<sup>th</sup> March 2013 and presented a paper titled “Review of Embedded Web Server Based on DAC System”, PP:162-165.
23. A two day training Programme on “*MATLAB & ITS TOOLBOXES*” was organized by ECE and EEE departments on 3<sup>rd</sup> and 4<sup>th</sup> April 2013.
24. A Three –day Workshop was organized “VLSI Design”, during 8 -10 February 2013, 600 participants are benefitted by this workshop.

25. GENECEES-2013 A technical paper contest was conducted on 1<sup>st</sup> March 2013 for which a total of 200 technical papers are received from various college throughout the state.
26. A two day training program on Embedded System Design using ARM processor during 2-3 July 2013 at Gudlavalleru Engineering College.
27. A two day workshop on “ Issues in IC design” for the faculty during 13-14 december 2013 at Gudlavalleru Engineering College.
28. A National level technical two day workshop entitled “Embedded System Development” is organized on 30-12-2013 & 31-12-2013 respectively by the ECE department, in association with the VLSI & Embedded System Research group, in the premises of Gudlavalleru Engineering College, Gudlavalleru.
29. 5 – day training program on Designing of Digital Circuits using Mentor Graphics Tools for the faculty, B.Tech and M.Tech students during 21-22 January 2014 at Gudlavalleru Engineering College.
30. Three day training program on “Design and Development of sensor based applications using Microcontrollers” for the III and IV B.Tech students during 4-6 February 2014 at Gudlavalleru Engineering College.
31. Three day workshop on “Theory and applications of Intelligent Signal Processing” held at Dept.of ECE, Gudlavalleru Engineering College during 28<sup>th</sup> February – 2 March 2014.
32. National Conference (NCIET 2013) for the faculty during 27-28 December 2013 at Gudlavalleru Engineering College campus as Convener
33. A One week Faculty Development Program on “ Development of Wireless Sensor Networks using Network simulator – Hands on Experience during 1-5 December 2015 at GEC
34. Coordinated three day workshop on “ Over on Latest Telecom Technologies during 11-13 January 2016 held at BSNL Vijayawada coordination with GEC
35. A Three day workshop on” Swarm Intelligence Techniques –Applications to signal processing held on 5-7 February 2016 at GEC
36. A one day Workshop on “ Curriculum Inputs” at GEC on 7<sup>th</sup> August 2016.
37. A one day Workshop on “Curriculum Design: Introduction to Cognitive Internet of Things (IoT)” at GEC on 3<sup>rd</sup> August 2016
38. A Two day Staff Training Program on “ Simulation of Linear & Digital Integrated Circuits , Microprocessor based applications using NI Multisim” held during 4-5 November 2016.
39. One week Faculty Development program on “ Hands on Experience in Signal Processing Applications “ held during 7-12 November 2016.
40. A one day workshop on “ Intelligent world connected together : Internet of Things on 6<sup>th</sup> September 2016 at GEC
41. A five day workshop on “VERILOG Programming: Hands on experience” On 3<sup>rd</sup> – 7<sup>th</sup> August 2016
42. A two day workshop on “Ethical Hacking & Cyber Security on 28-29<sup>th</sup> December 2016 at GEC
43. A Two day Training Program on “Mentor Graphic Tools” at GEC during 31<sup>st</sup> August 2017 to 1<sup>st</sup> September 2017
44. A one day Workshop on” Curriculum Design- Bloom’s Taxanomy” at GEC on 3<sup>rd</sup> January 2018.
45. A one day Workshop on” Curriculum Design- Bloom’s Taxanomy- Implementation ” at GEC on 12<sup>th</sup> July 2018.
46. A webinar on “Career Choices in Civil Services” by Dr.Kiranmayi Koppiseti, IRTS who cracked all India Rank of 573 in UPSC organized by Department of Electronics and

Communication Engineering, Gudlavalleru Engineering College on 30<sup>th</sup> June 2020. 185 students participated.

47. A one week International online Knowledge Development Programme on “Challenges and Advancements in the Design of IoT, Embedded and VLSI systems:A Researchers View (CADIEVR-2020)”, organized by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru from 8<sup>th</sup> to 13<sup>th</sup> June 2020 as a convenor .
48. A Webinar on “Introduction to Radio frequency Measurements for Cellular and Wireless Communication Systems” organized by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College on 25<sup>th</sup> May 2020. Dr.Ramakrishna Yellapantula, Senior Member of Technical Staff, Lite Point Corporation, USA is the resource person.A total of 85 participants attended.

### **Technical Activities Organized Under IE(I), APSC, Vijayawada:17**

#### **GUEST LECTURES :48**

1. Delivered guest lecture on “8085 microprocessor & its System Training” to the III & IV B.Tech. students of CSE, organized by COMITY, CSE students association during July 2002.
2. Delivered lectures at Two day Workshop on “VLSI Design”, organized by IETE, Tirupati during 14-15 July 2007.
3. Delivered seminar on “8086 Microprocessors and Applications” for the III and IV B.Tech. EEE students, organized by ESCON, Dept. of EEE, Gudlavalleru Engineering College during 2007.
4. Delivered lecture on “Xilinx Design flow & lab Implementation” at one day workshop on “Verilog Programming and Implementation” organized by Dept. of ECE, Gudlavalleru Engineering College, during 27-28 October 2007.
5. Delivered lecture on “Teaching, Learning-Visual Aids” at 3 day workshop on “Pedagogy” organized by Dept. of MBA, Gudlavalleru Engineering College, during March 2008.
6. Delivered a lecture on “Embedded Systems: A future world” at Department of Electronics VSR Govt. Degree College, Movva, Krishna Dt. on 25-10-2008.
7. Delivered lecture on “Embedded Systems: The Future Scenario” at VSR Govt. Degree & PG College, Movva, during 25<sup>th</sup> October 2008.
8. Delivered a Seminar talk on ”Protecting Children in Cyber Space” on the occasion of 41<sup>st</sup> World Telecommunication and Information Society Day 17<sup>th</sup> May 2009, organized by IETE & IEI Vijayawada Centre, Vijayawada.
9. Delivered lecture on “Embedded Systems” at Usharama College of Engineering & Technology during inauguration of ECE Students Association on 2<sup>nd</sup> April 2010.
10. Delivered lecture on “8086 Microprocessor Microcontrollers :: Programming and Interfacing” at State Level 2 day training program for lab technicians on “Microprocessors Theory and Lab Practice” organized by Dept. of ECE, Gudlavalleru Engineering College during 26-27 November 2010.
11. Delivered a Seminar talk on ”Low Power VLSI: A View” at Swarnandhra College of Engineering & Technology, Narasapur, during January 2010.

12. Delivered a talk on "How to present a technical PPT. in better way" on 11<sup>th</sup> August 2010, on the occasion of Non-technical paper contest at Gudlavalleru Engineering College, Gudlavalleru.
13. Delivered a talk on "Embedded Systems: A Design Approach" on 2<sup>nd</sup> April 2011 at Usha Rama College of Engineering, Telaprolu
14. Delivered lectures on " i) VLSI Design Styles ii) Xilinx FPGA design during November 2011, one day workshop on" Digital, Analog and Mixed signal VLSI Design" organized by Dept. of ECE, Gudlavalleru Engineering College
15. Delivered a research oriented lectures on i) Advanced VLSI Design: a low power prospective ii) FPGA, ASIC and SoC design styles iii) Design of Application specific Instruction set Processor iv) Practical session of Various reports generation using Xilinx software at National workshop titled " VLSI design and Testing" on the following sessions during 3<sup>rd</sup> December 2011, conducted by Viswodaya Institute of Technology & Science, Kavali-524 201
16. Delivered lectures on i) Low power VLSI Design ii) Embedded Systems at Faculty Development program on " VLSI and Embedded System Design" during 7-8 July 2012, conducted by Dept.of ECE, Gudlavalleru Engineering College in association with IETE, Vijayawada centre.
17. Delivered seminars on i) Embedded Systems and design ii ) 8051 Microcontrollers and its applications at Vignan Lara Institute of Technology, Vadlamudi students of IV B.Tech ECE & IT during 11<sup>th</sup> July 2012.
18. Delivered a seminar on "Microprocessors and Microcontrollers : Recent trends and Applications" to the IV B.Tech students (ECE and CSE) of Amrita sai institute of science and technology, kanvhikacherla, Vijayawada on 21<sup>st</sup> July 2012 (FN).
19. Delivered a Talk on " VLSI Technolgy" to the students of III & IV B.Tech (ECE) students of Layola Institute of Engineering and Technology, Vijayawada on 21<sup>st</sup> July 2012 (AN)
20. Delivered a guest lecture on " Embedded System: challenges" on the occasion of 45<sup>th</sup> Engineers day celebrations at IETE, Vijayawada centre on 15<sup>th</sup> September 2012.
21. Delivered a talk on " Role of IETE student members and contribution towards research", on the occasion of Inauguration IETE Student Forum at VKNB Engineering College, Gudivada on 14<sup>th</sup> September 2012.
22. As a Chairman of IETE Vijayawada Centre inaugurated ISF at SRK Institute of Engineering & Technology, Vijayawada on 5<sup>th</sup> January 2013 as a Chief Guest of Inaugural Function.
23. Delivered guest lecture on "Microprocessors & Microcontrollers: Embedded Systems" to the II & III B.Tech students of ECE at SRK Institute of Engineering & Technology on 5<sup>th</sup> January 2013.
24. Attend as Chief Guest in the inaugurate function of IETE student forum at Nova College of Engineering & Technology, Vijayawada on 3<sup>rd</sup> January 2013.
25. Acted as Chief Guest in inauguration of M Tech VLSI& Embedded Systems at Universal College of Engineering, Guntur on 19<sup>th</sup> December 2012.
26. Delivered a Talk on "Recent trends on low power VLSI" at Universal College of Engineering, Guntur on 19<sup>th</sup> December 2012.
27. Acted as Chief Guest in ISF at VignanNerulla College of Engineering, Guntur on 2<sup>nd</sup> December 2012.
28. As a chairman of IETE Vijayawada Centre Inaugurate IETE Student Forum (ISF) at Tirumala Engineering College, Narasaraopet and delivered a Guest Lecture on "VLSI" on 6-2-2013.



29. As a Chairman of IETE Vijayawada Centre invite to attend as a Chief Guest for IETE Foundation Day Celebrations at Bapatla Engineering College, Bapatla and delivered a Guest Lecture on "Trends in Low Power VLSI" on 12-2-2013.
30. Delivered a talk on "VLSI Designing" on 22<sup>nd</sup> February 2013 at VKR & VNBAGK Engineering College, Gudivada.
31. Delivered a talk on "Low Power VLSI Design Styles: A view" on 18<sup>th</sup> February 2013 at Gayatri Vidya Parishad College of Engineering, Madhurawada, Visakhapatnam.
32. Delivered a talk on "Advanced VLSI Design and challenges", on the occasion of Inauguration IETE Student Forum at NRI Institute of Engineering, Agiripalli on 29<sup>th</sup> June 2013
33. Delivered a seminar on "Low Power VLSI Design and Challenges" at Two day national workshop on "VLSI Design and Tools" during 26-27 July 2013 at Kakinada Institute of Engineering & Technology, Korangi.
34. Delivered a guest lecture on "VLSI Design Low Power Challenges" at Dept. of ECE, KLU University on 8<sup>th</sup> January 2014 to the students of III B.Tech ECE.
35. Delivered GATE orientation Lectures on "8085 Microprocessor and Memory design" to the IV B.Tech ECE GATE aspirant students on 6-7 February 2014.
36. Delivered guest lecture on " VLSI Design-Low Power and Dynamic Power Reduction Techniques" at Sasi Institute of Engineering & Technology, Tadepalligudem to the B.Tech students as well faculty of ECE department on 21<sup>st</sup> February 2014.
37. Delivered a guest lecture on "Advanced Embedded Interfacing Methods" at National workshop " Advanced Embedded System Design- 2014" organized by Dept. of EEE & ECM, PVPSiddahrdha Institute of Technology, Vijayawada on 28<sup>th</sup> February 2014 for the faculty of various engineering colleges.
38. Delivered a lecture on "Sensors: Its Applications". Two-Day All India Seminar On "Agricultural And Horticultural Applications Of Unmanned Vehicles For Micro – Farming during 26<sup>th</sup> – 27<sup>th</sup> March, 2015 organized by The Institution of Engineers (India), Vijayawada Local Centre Under the Aegis of Aerospace Engineering Division, IEI In association with Shri Vishnu Engineering College for Women, Bhimavaram & National Design and Research Forum, Bangalore.
39. Delivered a talk on "Low Power VLSI : Challenges & Issues: on the occasion of two day all India Workshop on "Optimizing VLSI Design Architecture for Real time Environment" organized by IE(I) Vijayawada Local Centre and PACE Institute of Technology & Science at PACE Engineering College, Ongole on 10<sup>th</sup> October 2015 and attended workshop during 9-10 October 2015.
40. Delivered a lecture on "Emerging opportunities in Electronics and Communication Fields" at one day workshop on Career Counselling organized by THE HINDU Education Plus, Vijayawada on 2<sup>nd</sup> June 2016.
41. Delivered a lecture on "**Role of Electronics in the development of IOT**", for IV B.Tech ECE Students of KKR & KSR Institute of Technology and Sciences, Guntur on 22<sup>nd</sup> May 2016.

42. Delivered a lecture on “**Challenges and various issues on VLSI Design**”, for IV B.Tech ECE Students of A1 Global Institute of Engineering and Technology, Markapur, Prakasam District on 18<sup>th</sup> May 2016.
43. Delivered lecture on “Embedded System Development” at one week refresher course organized by R and D center, Dept.of ECE, GEC during 17-21 November, 2015 for Faculty
44. Delivered invited Talk on “ IoT : Challenged People” & Organized the session as a session chair at IEEE International Conference :SPACES 2018” during 4-5 January 2018, organized by KLEF University & IEEE Hyderabad Section.
45. Delivered a talk on “Embedded Systems and Internet of Things” to the B.Tech Final year students of Department of ECE, NRI Institute of Technology , Agiripalli on 4<sup>th</sup> August 2018.
46. Delivered a talk on “ Engineers: Society – Human Relations” to the B.Tech Second , Third and Final year students of Department of ECE, Dhanekula Institute of Engineering & Technolgy, Vijayawada on 15<sup>th</sup> September 2018 on the eve of 51<sup>st</sup> Engineers Day Celebrations and attended as Chief guest of the function.
47. Delivered a speech on “ Advances in Engineering & Technology “ to the B.Tech Second and Third year students of Department of ECE, UCEN, JNTUK Narasaraopeta on the occasion of ECETrox Fest Inaugural on 17<sup>th</sup> September 2018 as Chief guest of the function and adjudged the Project Expo Competitions as a Jury Member.
48. Delivered a talk on “ Low Power VLSI Design : Challenges “ at one week National level online faculty development program on “Research challenges and Emerging Trends in Electronics and Communication Engineering”, organised by Ramachandra college of Engineering during 27<sup>th</sup> may to 1<sup>st</sup> june 2020 On 30<sup>th</sup> May 2020.

#### **AWARDS: 16**

1. **Awarded “Telugu Vignana Parithoshikam”** for the academic year 1987-88 and 1988-89 by Govt. of Andhra Pradesh.
2. **Best Lecturer Award** of SGD & PG College, Visakhapatnam for the academic year 1996-1997.
3. **Fellowship** for 19<sup>th</sup> International Conference on VLSI Design & 5<sup>th</sup> International Conference on Embedded Systems, at Taj Krishna, Hyderabad during 3-7 January 2006, organized by VSLI Society of India and IEEE.
4. **Fellowship** for 21<sup>st</sup> International Conference on VLSI Design and 7<sup>th</sup> International Conference on Embedded Systems theme: Technology Challenges in the Nano Electronics era. Supported by VLSI Society of India, IEEE Circuits and Systems Society and IEEE Solid State Circuits Society during 4-8 January 2008 held at HICC, Hyderabad.
5. Received **appreciation certificate** from Principal, Management Gudlavalleru Engineering College for the devoted effort and hardwork, during AICTE-NBA, 22-24 February 2008.
6. Received **appreciation certificate** towards research contributions to ICCESSE 2011: International Conference on Computer, Electrical, and Systems Sciences, and Engineering from International Scientific Research and Experimental Development, WASET CHAIR during 14-16 November 2011 held at Paris, France.

7. Received Best B.Tech Project Awards for the academic years 2004-2005, 2005-2006, 2006-2007, 2007-2008, 2010-2011, 2011-2012, 2012-2013, 2014-2015, 2016-2017, & 2017-2018
8. Received **certificate of appreciation** from JNTUK, Kakinada for the Year 2012 on the occasion of 4<sup>th</sup> University formation day 21<sup>st</sup> August 2012.
9. Felicitated on the occasion of 45<sup>th</sup> Engineers Day Celebrations by the LIONS Club, Gudlavalleru on 15<sup>th</sup> September 2012 towards contribution of research and acquiring Ph.D from JNTUH, Hyderabad during 1<sup>st</sup> June 2012.
10. Declared “**AANIMUTAM Life Time Achievement State Award -2012**” for the year 2012 by the Mother Theresa Social Welfare Organization, Hyderabad communicated on 14<sup>th</sup> August 2012.
11. Received **best paper award** from the 3<sup>rd</sup> international conference committee held at KLU University for the paper titled “ A Novel Implementation of 32-bit VLIW MISC processor on FPGA” during 26<sup>th</sup> July 2013
12. Received appreciation letter from IETE, New Delhi for successful completion of e-mode examinations of June 2012, Jan 2013 and December 2013 IETE examinations held at Vijayawada centre.
13. As a Member, attended ‘Independent Evaluation Committee’ meeting for evaluating the Project “Alakaananda Hydro Power Project” established near Alakaananda River, Uttarakhand by GVK Industries, Hyderabad on 8<sup>th</sup> December 2016
14. Awarded with “ **Certificate of Excellence award**” towards contribution of Academics and the Development of Institution of Engineers (India) , Andhrapradesh, Vijayawada by the IE(I), APSC, Vijayawada on 15<sup>th</sup> September 2018 on the eve of 51<sup>st</sup> Engineers Day Celebrations and Felicitated on this occasion.
15. NPTEL Certified **Top 1% ( Elite + Gold) grade in** on line certification Course “ Microprocessors and Microcontrollers **during Jan – April 2018 organized by IIT Kharagpur**, with a consolidated score of 90%
16. Awarded with “**Sarvottum Acharya Purshkar Award**” by Indian Servers and Andhrapradesh & Telanagana Information Technology Associations on 2<sup>nd</sup> October 2019 at Awards Ceremony on the eve of 152<sup>nd</sup> Birthday of Mahatma Gandhiji at Siddardha Auditorium, Vijayawada

#### **OTHER CO AND EXTRA CURRICULAR ACTIVITIES**

- |                 |   |  |
|-----------------|---|--|
| 1996 – 1997     | : | Acted as Sub-editor of the College magazine “JYOTHIRGAMAYI” of SGD & PG College (affiliated to AU) Visakhapatnam.              |
| 2001 -2002      | : | As faculty Advisor for Electronic and Communication Engineering Students Association (ECSAt), Gudlavalleru Engineering College |
| 2002,2003, 2004 | : | As chapter Advisor for ISTE Student Chapter (AP-20), Gudlavalleru Engineering College, Gudlavalleru.                           |
| 2002-2003       | : | Co-coordinator, Program Organization Committee, Gudlavalleru Engineering College, Annual Day Celebrations                      |

- 2003 : Convener, 2 –day National Level Student Technical Paper Contest (GENECES-2K3) conducted at Gudlavalleru Engineering College, Gudlavalleru during December 19-20, 2003.
- 2003-2004 : Editorial Board member of News Letter of “Technolight” Published ByGudlavalleru Engineering College, Gudlavalleru
- 2004-2005 : Chief Co-ordinator of “Class Time Table Committee” of GEC
- 2004 – 2011 : Co-ordinator, Stage Decoration Committee, Gudlavalleru Engineering College, Annual Day & GECFEST Celebrations.
- 2005 – Present : Chairman of Class Monitoring Committee (for all ECE Students)
- 2001-2008 : Lab-incharge for Microprocessors & Microcontrollers, ECAD Lab & M.Tech Lab.
- 2008 – Present : Member of advisory committee of ECE Department of swaranandhra college of Engineering &Technology, Narasapur
- 2009 : Convener, 2 day National Level Student Technical Paper Contest (GENECES-2K9) conducted at Gudlavalleru Engineering College, Gudlavalleru during December, 2009.
- 2010 – 2017 : IETE Student Forum (ISF) Advisor of Gudlavalleru Engineering College.
- 2010 – 2012 : Hon. Treasurer of IETE, Vijayawada Centre
- 2012 – 2014 : Chairman of IETE, Vijayawada Centre**
- 2012 – 2014 : Executive Committee member of Institution of Engineers (IE), Vijayawada center
- 2013 – 2016 : BoS, member of UCOE,ECE at JNTUK, Kakinada**  
BoS, member of, ECE at Swarnandhra Institue of Engineering & Technology, Narasapur
- 2013 : Convener , National Conference on “Innovations in Engineering and Technology (NCIET-2013)’ held at Gudlavalleru Engineering College, Gudlavalleru, AP, India during 27 – 28 December 2013
- 2014 – 2016 : Chairman of IE(I), Vijayawada Centre, Andhra Pradesh**  
Member, ETDB Division, IE(I), Kolkata  
Chairman, BoS, ECE, Gudlavalleru Engineering College
- 2016 – 2018 : Chairman of IE(I), AP State Center Vijayawada , Andhra Pradesh , GB member of ESCI, Hyderabad & National Council Member of IE(I), Kolkata**
- 2016 – 2019 : Member, Executive Council, JNTUK, Kakinada**
- 2016 – Present : Member, Advisory Board, Dept.of ECE, SVH College of

2018 : Engineering, Machilipatnam  
**Executive Chair, International Conference (CITAES-18), GEC**

**RESEARCH & DEVELOPMENT:**

**RESEARCH & DEVELOPMENT:**

**GRANTS by the Internal/External Agencies: 03**

1. Granted an amount of Rs.11.5 Lakhs towards modernization of ECAD Laboratory, "coordinator, MODROBS" from AICTE during the year 2009 for the period of two years.
2. Granted an amount of Rs.7.39 Lakhs towards modernization of Microprocessors and Microcontrollers Laboratory, "coordinator, MODROBS" from AICTE during the year 2012 for the period of two years.
3. Ms. D.Ramya Krishna (14481D3807) and Dr. M.Kamaraju received a Research Grant of Rs 95,900/- from R & D Cell, Institution of Engineers (INDIA), Kolkata in April 2016 for the project titled "A Novel Tree Approach for Data Aggregation in Wireless Sensor Nodes".
4. As Investigator, Internal R & D project titled "Design & Development of intelligence traffic control system and traffic guidance system using IOT", sanctioned an amount of Rs 70,000/- in the Year 2019 by the GEC authorities, duration of the work : 1 Year
5. As Investigator, submitted a Project, "Development of Intelligence SoC Based Automotive Vehicle Driving Assistive System" to the AICTE under RPS scheme duration of 36 months in the January 2019.

**RESEARCH CONTRIBUTIONS**

1. **Editorial board member of International Journal of VLSI and Communication Systems for the period 2009 to till date.**
2. Reviewer for Easy-Chair Conference System from the year 2008 to till date.
3. Reviewer for IEEE International Conference GICEEE held at Germany
4. Reviewer for IEEE international Conference Scored 2012 to be held at Malaysia
5. Developed Vehicle Navigation System using Microcontroller with the help of googlemaps.
6. Developed "A remote surveillance system" for night vision in consultation with BEL, Machilipatnam.

- 7.Developed “Intelligent Controlled Electrical Appliances” in an industry in association with Efftronics Ltd., Vijayawada.
- 8.Developed “Application Specific Instruction Set Processor” for aerospace applications.
- 9.Developed “Power optimized programmable Embedded Controller, A VLSI Design, as part of research contributions for the Ph.D. Program.
- 10.Developed “Automatic Traffic Light System based on the traffic Density” as part of B.Tech Project.
- 11.Developed “Automatic Car Parking system using Microcontroller”.
- 12.Reviewer for National Conference 1<sup>st</sup> and 2<sup>nd</sup>NCVS Coms’12 at Vignan University 10-11 February 2012 and December 2013.
- 13.Advisory committee member of 3<sup>rd</sup> International conference on RF & signal processing Systems (RSPS 2013), held at KLUUniversity during 26-27 July 2013.
- 14.Developed *DSP based Embedded Fingerprint Recognition System in the year 2013*
- 15.Reviewer for British Journal of mathematics and computer science, UK publishers in the year 2013

#### **Ph.D GUIDANCE**

1. No.of Ph.D scholars guided : 02
2. No.of Ph.D scholars guiding as Supervisor : 06
3. No.of Ph.D scholars guiding as Co-Supervisor : 04

#### **PROJECT GUIDANCE**

- 1.Number of Projects guided for B.Tech Students : 47
- 2.Number of Projects guided for M.Tech Students : 16
- 3.Number of Mini-Projects (Industry oriented) Guided : 15

For B.Tech. Students