

Academic Profile

- Ph.D., (Pursuing):** from Aug 2012 onwards, JNTUA, Ananthapuramu.
Topic Name: Design of Digital Logic Circuits Using Molecules
- Master of Engineering** (Electronic Instrumentation) from Andhra University.
Passed with 76% in Apr 2004
- Bachelor of Technology** (Electronics & Communication Engineering) from Nagarjuna University
Passed with 78% in Apr 2002.
- Diploma** (D.E.C.E) with 79% from S.B.T.E.T in Apr 1998.
S.S.C with 79% from Board of Secondary Education, Andhra Pradesh in Apr 1995.

Experience

- Name of the Post : Associate Professor
Period : July 2008 to till date
Department : Electronics and Communication Engineering
Institution : Gudlavalleru Engineering college, Gudlavalleru.
 - Name of the Post : Assistant Professor
Period : July 2005 to June 2008
Department : Electronics and Communication Engineering
Institution : Gudlavalleru Engineering college, Gudlavalleru.
 - Name of the Post : Lecturer
Period : July 2003 to June 2005
Department : Electronics and Communication Engineering
Institution : R.V.R& J.C College of Engineering.
- Total Experience : 13 years 01 month**

Computer Proficiency

Programming language: FORTRAN 77, C, C++, MATLAB,
Packages: Gauss view, Atomistix ToolKit and Virtual Nano Lab
Operating System : Windows 9x, 2000, XP, NT, LINUX

Subjects handled

PG level:

- Microcontrollers for Embedded Systems
- Advanced Computer Architecture
- Embedded and Real Time Systems
- Microcomputer System Design

UG level:

- Electronic Devices & Circuits
- Embedded and Real Time Systems
- Microprocessors & Interfacing
- Cellular & Mobile communication
- Switching theory & logic design
- Linear Devices & IC applications
- Active & passive Filter design
- Pulse and digital circuits
- Measurements & Instrumentation
- Circuit Theory

Academic works carried out:

- Worked as JNTU **ONLINE EXAMS** coordinator.
- Worked as UPS Maintenance Incharge
- Worked as a Coordinator for NBA accreditation 2008,2013
- Worked vigorously for AICTE inspection 2005.
- Prepared Advanced Communication Lab Manual.(M.Tech II-sem)
- Prepared Pulse and Digital Circuits Lab Manual.
- Prepared Microprocessor & Microcontrollers Lab Manual.
- Attendance, Internal marks, Results Analysis Incharge.
- Students Seminars Incharge.
- Staff Seminars Incharge.
- Worked as Tours in charge.
- Working as a UPS Maintenance In charge.
- Member, College Staff selection committee.
- Member, Project review committee.
- Asst. Examination In charge, for university Examinations.
- Coordinator, B.Tech., Project works.
- Member, Comprehensive Viva – Voce Committee

Journal Papers:

1. A.Mallaiah, G.Harish, Dr.M.Kamaraju & T.Subhashini, “Implementation of AHB Bus Tracer with Dynamic Multiresolution for Lossless Real Time Compression”, International Journal of Engineering Science & Advanced Technology, May-June 2012 Volume-2, Issue-3, 445 – 448, ISSN Number 2250–3676.
2. A.Mallaiah, M.RatnaKiran, T.Subhashini & Dr. G.N. Swamy, “DTT based hybrid embedded coder for image compression using SPHIT algorithm”, Elixir International Journal Dec 2012, Page No. 11880-11884, ISSN 2229-7123

3. A.Mallaiah, SK.Shabbir, T.Subhashini & Dr. G.N. Swamy, "SPHIT algorithm with Huffman encoder for image compression and quality improvement using Retinex Algorithm", International journal of advanced scientific and technical research, August 2012, Issue 2 volume 4, 163-170, ISSN 2249-9954
- 4.N.Yamini Lakshmi, K.Ravikumar, A.Mallaiah & M.Koteswara Kishore, "Design of Tracing Accidental Vehicle By Using GPS and MEMS Accelerometer" International Journal of Engineering Research & Technology, July 2013, Vol. 2 Issue 7, ISSN 2278-0181.
5. A.Mallaiah, P.Imrankhan & Dr. G.N. Swamy, "A Multi Level Zone Based Congestion Control Mechanism for Multicast Routing in MANETS" International Journal of Computer Science and Information Technologies, Jan 2014, Vol. 5 (1), 2014, Page: 174 – 180, ISSN 0975-9646
6. A.Mallaiah, K.Rupeshkumar & Dr. K.Padmapriya, "Low Power Design of 8 Bit Adder in MTCMOS Circuit Using Tri Mode Technique" International Journal of Information & Computation Technology, Jan 2014, Volume 4, Number 1, page. 15-21, ISSN 0974-2239.
7. A.Mallaiah, K.Lakshmi Narayana & A.Jaya Lakshmi, "Design and Simulation of a Low Power Viterbi Decoder using Constraint Length Nine" International Journal of Computer Applications, Dec 2013, Volume 84 – No 2, Page: 24-27, ISSN 0975 – 8887
8. A.Mallaiah, Dr. G.N. Swamy & Dr. K. Padmapriya, "Current Transportation in Semiconductor Devices and Molecular Material Devices and perspectives" Procedia Material Science, Volume – No 5, December 2014, Page: 1097 – 1106, doi:10.1016/j.mspro.2014.07.403
9. Lavanya Nalluri, A.Mallaiah & Satish Dhavan Vadlamudi & Koteswa rao vadlamudi, "Implementation of Radar Range Tracking Algorithm in FPGA" International Journal of Applied Engineering Research, Volume 9, Number 22 Page: 17381-17392, ISSN 0973-4562
10. Sayed Nayab Basha, A.Mallaiah, Dr. G.N. Swamy & A.Jaya Lakshmi, "Design and Implementation of Pollution Control Embedded System for Vehicles" International Journal of Applied Engineering Research, Volume 9, Number 23 Page: 22693-22703, ISSN 0973-4562
11. A.Anusha, A.Mallaiah, Dr.G.N.Swamy & A.Jaya Lakshmi, "GSM Based Prepaid Energy Meter to Ascendancy Electricity Thieving" International Journal of Applied Engineering Research, Volume 9, Number 23 Page: 20843-20852, ISSN 0973-4562
12. A.Mallaiah, Dr. G.N. Swamy & Dr. K. Padmapriya, "Observation of Terminal Atom Effect on Charge in NH₂-C_n-NO₂ Molecule: A Hartree- Fock Theory" Communications on Applied Electronics (CAE), Volume 5 – No.2 , May 2016, Page: 11 – 13, doi: 10.5120/cae2016652212
13. A.Mallaiah, Dr. G.N. Swamy & Dr. K. Padmapriya, "Asymmetric molecular diode energy calculation using Extended H^uckel and Parametric method" NANOSYSTEMS: PHYSICS, CHEMISTRY, MATHEMATICS, Volume 7 – Issue 3 , June 2016, Page: 397 – 575, doi: 10.17586/2220-8054-2016-7-3-569-574

14. A.Mallaiah, Dr. G.N. Swamy & Dr. K. Padmapriya, “ Effect of Γ orbital on I/V characteristics and Transmission in Molecular Diode Structures with Au Contacts”, *Journal of Nano and Electronic Physics*”, Volume 9 – Issue 1 , March 2017, Page: 01001-1 - 01001-5 , doi: 10.21272/jnep.9(1).01001
15. A.Mallaiah, Dr. G.N. Swamy & Dr. K. Padmapriya, “1-bit and 2-bit comparator designs and analysis for quantum-dot cellular automata”, *NANOSYSTEMS: PHYSICS, CHEMISTRY, MATHEMATICS*, Volume 8 – Issue 6 , December 2017, Page: 709 - 716, doi: 10.17586/2220-8054-2017-8-6-709-716
16. A.Mallaiah, Dr. G.N. Swamy & Dr. K. Padmapriya, “ Efficient Code Converter Circuit Design and Implementation in QCA Technology” *Journal of Engineering and Applied Sciences*, Volume 12 (Special Issue 11), Page: 9102-9105, 2017. doi: 10.3923/jeasci.2017.9102.9105
17. A.Mallaiah, Dr. G.N. Swamy & Dr. K. Padmapriya, “Designing Efficient Multiplexer, Demultiplexer QCA logic circuits and Power Dissipation Analysis –A new approach ” *International Journal of Scientific & Engineering Research* Volume 9, Issue 7, ISSN 2229-5518 , Volume 9 (Issue 7), Page: 1995-2004, July 2018.

Conference Papers:

- 1.G. Kalyana Keerthi, A.Mallaiah, T.S.R.K.Prasad “A Novel Architecture of Multi-Residential Gateway for practical application” *National Conference on Signal Processing & Communication Systems (NCSPCS)*, conducted by RVR& JC College of Engineering during Feb 25-26, 2010.
2. A.Mallaiah, K.Jayaprakash, T. Venkatalakshmi, “VLSI Implementation for Basic ARPS Algorithm for Video Compression” *International Conference on Technology and Innovation ICTI 2011*, organized by International Research & Development Organization Green Park, Chennai, July, 26 2011.
3. A.Mallaiah, G.Harish, Dr. M.Kamaraju, “Design of an On-chip AHB Bus Tracer for SOC” *National Conference on Advances in Engineering and Technology*, at Yeshwantrao Chavan College of Engineering Wanadongri, Nagpur-441110, during February, 28-29, 2012.
4. G.Sita Annapurna, A.Anusha, A.Mallaiah, “Design of Tracing Accidental Vehicle By Using GPS and MEMS Accelerometer” *International Conference on Systemic, Cybernetics and Informatics, ICSCI 2014* at Pentagram research Centre Private Limited, Hyderabad, during Feb 3-6, 2014.
5. A.Mallaiah, Dr. G.N. Swamy, Dr. K.Padmapriya, “Current Transportation in Semiconductor Devices and Molecular Material Devices and perspectives” *International Conference on Advances in Manufacturing and Materials Engineering* at NIT Karnataka, Surathkal, Mangalore during March 27-29, 2014.
6. M.Lokesh Chodary, A. Mallaiah & A. Jaya Lakshmi, “Design of Wallace Tree Multiplier Using Sparse Kogge-Stone and Brent-Kung Adders”, 6th *International Conference On Innovations In Electronics & Communication Engineering* At Guru Nanak Institute Of Technology Ibrahimpatnam, R. R District, Hyderabad-501506 (T.S), 21-22 July 2017.

7. A. Mallaiah, Dr. G.N. Swamy, Dr. K.Padmapriya, “A Novel Design of Majority Gate (Three variable) Circuits and Comparative Analysis using Quantum-Dot Cellular Automata (QCA)” 1st International Conference on Power, Computer, Communication & Artificial Intelligence (ICPCCAI 2019), JECRC University, Jaipur during April 19-21, 2019.

Workshops Attended:

1. Workshop (STTP) on “Computer Applications in Power Systems, Control Systems & Networks” Organized by RVR &JC College of Engineering during Mar 15-29, 2004
2. One day National workshop on “Technology Trends in Mobile Computing and Communication” organized by IISC, Bangalore on April, 10, 2004
3. National workshop on “National Workshop on Advances in signal and Image Processing (ASIP-2006)” organized by JNTUK, Kakinada, during Feb 27-28, 2006.
- 4.” Workshop on VLSI Design” organized by GEC Gudlavalleru, Feb 9-10, 2007.
5. National level workshop on “Instructional Design and Delivery” organized by GEC Gudlavalleru, during July 3-8, 2006.
6. One day workshop “DSP Processors [TMS 320C6711]” attended at GEC Gudlavalleru, on Sep 21, 2007.
7. Two days National level workshop on “Verilog Programming & Implementation” organized by GEC Gudlavalleru, on Oct 27-28, 2007.
8. Workshop on “Current Trends in Biometrics” organized by GEC Gudlavalleru during Nov 2-14, 2009.
9. National level workshop on ” Mentor Graphics (Front End & Back End) And XILINX Tools” conducted by GEC Gudlavalleru during Sep 13-17, 2010.
10. National level workshop on “Aakash for Education” conducted by GEC Gudlavalleru during Nov 10-11, 2012.
11. National level workshop on “Issues in Integrated Circuits (ICs) Design” conducted by GEC Gudlavalleru during Dec 13-14, 2013.
12. National level Workshop on “Analog electronics” organized by GEC, Gudlavalleru [National Mission on Education through ICT (MHRD)] during June 4-14, 2013.
13. Complementary Training/Orientation on “MATLAB, Simulink & Related Tool Boxes for Engineering Education” organized by GEC Gudlavalleru, during Apr 3-4, 2013
14. National level Workshop on “Signals & Systems” organized by GEC, Gudlavalleru [National Mission on Education through ICT (MHRD)] during Jan 2-12, 2014.
15. National level Workshop on “Recent Trends and Developments in the field of Computer vision” organized by VR Siddhartha Engineering College Kanuru, Vijayawada during Dec 20-21, 2013.

16. . National level Workshop on “Theory & Application of Intelligent Signal Processing” organized by GEC, Gudlavalleru during Feb 28 to Mar 2, 2014.

17. Workshop on “Speech Processing: Current Challenges and Hands-on-Experience” Conducted at GEC Gudlavalleru, on August 23, 2014

18. Workshop on “Ultra Low Power Communication using CC430 Microcontroller:: Hands on Experience” conducted by GEC Gudlavalleru on Feb 7, 2015.

Refresher Courses Attended:

1. One week Refresher course on Electronic Devices and Circuits, at GEC Gudlavalleru during Sep 23-28,2013.
2. One week Refresher course on Microprocessors & Microcontrollers, at GEC Gudlavalleru during Nov 17-21,2015.

Interaction with outside world

1. Participated as judge for National level paper presentation at IETE Local center Vijayawada, on 1-02-2015.
2. Participated as judge for National level paper presentation at Sri Vasavi Engineering College, Tadepalligudem on 3-03-2015.

Personal Information

Name	: Akula Mallaiah
Gender	: Male
Father’s Name	: A.Pulliah
Date of Birth	: 28-09-1979
Nationality	: Indian
Religion	: Hindu
Marital Status	: Married
Languages Known	: English, Telugu
Address for Communication	: Zami Golve palli Pamaru(M.D) Krishna (D.T) A.P-521322

I hereby declare that all the above information is true to the best of my knowledge.

Yours faithfully,

Station: Gudlavalleru
Date : 16-05-2019

(A. MALLAIAH)