

### Faculty Personal Information

	<b>Mr.A.RAJESH</b>
<b>Designation</b>	: Assoc .Professor
<b>Years of Experience</b>	: 17 years
<b>Email Id</b>	: a.rajesh@aceec.ac.in
<b>Employment Status</b>	: Full Time - Ratified by JNTUH
<b>Areas of Research</b>	: Low Power VLSI
<b>UG Degree</b>	: B. Tech (Electronics and Communication Engineering)
<b>PG Degree</b>	: M. Tech(VLSI SYSTEM DESIGN)
<b>Ph.D</b>	: Pursuing(JNTUH)
<b>Subjects Taught:</b> <ol style="list-style-type: none"><li>1. Probability theory and Stochastic Process</li><li>2. Switching Theory and Logic Design</li><li>3. VLSI Design</li><li>4. Electromagnetic waves and Transmission lines</li><li>5. Signals and Systems</li><li>6. Embedded System Design</li><li>7. Electronics Measurement and Instrumentation</li><li>8. Electronic Devices &amp; Circuits</li><li>9. Digital Design using Verilog HDL</li><li>10. Pulse Digital Circuits</li><li>11. Microprocessors &amp; Microcontrollers</li><li>12. Analog Communication</li></ol>	

### **No. of publications in International journals:**

1. Paper on” **Design and Implementation of CAN Controller for Embedded systems**” at international Conference(ICIECE-2012) to be held on 20-21 July 2012 under Gurunanak Institute of Technology,Hyd.
2. A Paper on “**An Efficient Architecture of Low Power CSLA for Data Processing Applications**” at 2nd INTERNATIONAL CONFERENCE ON INNOVATIONS IN ELECTRONICS & COMMUNICATION ENGINEERING (ICIECE - 2013) August 9-10, 2013,GNIT, Ibrahimpatnam, R.R. District., Hyderabad, A.P, India Pin-501506
3. A Paper on “**Design of blanking interface module (BIM) & duty cycle measurement (DCM) module for external system interface unit for receiver Application**” at 3<sup>rd</sup> INTERNATIONAL CONFERENCE ON INNOVATIONS IN ELECTRONICS & COMMUNICATION ENGINEERING (ICIECE - 2014) July, 18-19, 2014,GNIT, Ibrahimpatnam, R.R. District., Hyderabad, A.P, India Pin-501506.
4. A Paper on “**Design& implementation of a third generation (3G) mobile communication standard-TDSCDMA**” at 3<sup>rd</sup> INTERNATIONAL CONFERENCE ON INNOVATIONS IN ELECTRONICS & COMMUNICATION ENGINEERING (ICIECE - 2014) July, 18-19, 2014,GNIT, Ibrahimpatnam, R.R. District., Hyderabad, A.P, India Pin-501506.PP.NO.50
5. A Paper on “**Design& implementation of wideband CDMA (WCDMA)for mobile Communication**” at 3<sup>rd</sup> INTERNATIONAL CONFERENCE ON INNOVATIONS IN ELECTRONICS & COMMUNICATION ENGINEERING (ICIECE - 2014) July, 18-19, 2014,GNIT, Ibrahimpatnam, R.R. District., Hyderabad, A.P, India Pin-501506.PP.NO.50
6. A Paper on “**Data Encoding Techniques for Reducing Energy Consumption in Network on Chip**” at 4th INTERNATIONAL CONFERENCE ON INNOVATIONS IN ELECTRONICS & COMMUNICATION ENGINEERING (ICIECE - 2015) August, 21-22, 2015,GNIT, Ibrahimpatnam, R.R. District., Hyderabad, A.P, India Pin-501506.
7. A Paper on “**An Optimized Design of Secure Differential Logic Gates for DPA Resistant Circuits**” at 4th INTERNATIONAL CONFERENCE ON INNOVATIONS IN ELECTRONICS & COMMUNICATION ENGINEERING (ICIECE - 2015) August, 21-22, 2015,GNIT, Ibrahimpatnam, R.R. District., Hyderabad, A.P, India Pin-501506.
8. A Paper on “**Design of High Performance Phase Locked Loop for Clock Synchronization**” at THE FIFTH INTERNATIONAL CONFERENCE ON WIRELESS COMMUNICATIONS, VEHICULAR TECHNOLOGY, INFORMATION THEORY, AEROSPACE AND ELECTRONIC

SYSTEMS(Wireless Vitae 2015)-**Global Wireless Summit-2015** at Dec 13 – 16, 2015 at Novotel, HICC, Hyderabad

9. A Paper on “**Design and Analysis of High Performance and Low Power Current Mode Logic CMOS**” at **INTERNATIONAL CONFERENCE ON COMMUNICATIONS, SIGNAL PROCESSING, COMPUTING AND INFORMATION TECHNOLOGIES** at December 18-19, 2015 at MallaReddy College of Engineering and Technology, Hyd.

11. A Paper on "**Design of Low Power & High Performance Dual Vdd and Multi Vth Level Converter**" **Joint International Conference on Artificial Intelligence & Evolutionary Computations in Engineering Systems (ICAIECES-2016) & (ICPCIT-2016)** 19-21 May 2016 pg.no.115-116.

12. A Paper on "**Dual Vdd and Single Vth Level Converter for Clock Distribution Network**" at 3rd International Conference on Elec. ,Electronics,Engg Trends,Commn,Optimization and Sciences (EEECOS-2016) 1-2 June 2016.

13. A Paper on "**Design of Level Converters for Low Power Scheme in Clock distribution Networks**" at 3rd International Conference on Elec. ,Electronics,Engg Trends,Commn,Optimization and Sciences (EEECOS-2016) 1-2 June 2016.

#### **No. of publications in International Conferences:**

1. Publish in International Journal on “**VHDL Implementation of Turbo encoder and decoder using Log-Map based Iterative Decoding**” at International Journal of Electronics and Communications (IJEC), Volume – 1, Issue – 1, August 2012 .ISSN 2279 – 0098.

2. Published in international Journal on “**Implementation of Turbo Decoder using Soft input soft output Iterative Decoder** “ at IJSETR, Vol-3,Issue-13,PP.No.2937-2944,June 2014 ISSN No. 2319-8885.

3. Published in international Journal on “**Reduction of Power Dissipation and Parameter Variation in VLSI circuits**” at IJRECE, Vol-2,Issue-3,PP.No.111-117,June 2014 ISSN No. 2321-3159.

4. Published in international Journal on “**A High Speed Double Precision Binary Floating Point Multiplier using Dadda Algorithm**” at IJRIS, Vol-3,Issue-9,PP.No.14-25,September 2014 ISSN No. 2319-9725.

5. Published in International Journal on ”**Low Power Multi GHz Circuit Techniques in VLSI**” at IJEC,Vol.3 ,Issue-3,PP.No.001-007,March 2015,ISSN No.2321-5984.

6. Published in International Journal of Innovative Research in Advanced Engineering on “**Clock Distribution using Multiple Voltages**” at IJIRAE, Vol.3 ,Issue-5,ISSN No.2349-2163.

7. Published in International Research Journal of Engineering & Technology on “**A High Performance Clock Distribution Network for System on Chip**” at IRJET, Vol.3 ,Issue-3,ISSN

No.2395-0056

8. Published in Journal of Emerging Technologies & Innovative Research on “**Dual-VDD, Single-Frequency Clocking Methodology for System on Chip**” at JETIR, Vol.3 ,Issue-6, ISSN No.2349-5162.

9. Published in International Journal of Research in Signal Processing, Computing & Communication-System Design on “**Design and Analysis of High Performance and Low Power Current Mode Logic CMOS**” at (IJSPCS),Dec 2015 ISSN No: 2395-5187

10. Published in I J C T A, 9(15), 2016, © International Science Press on “**Design of LowPower & High Performance Dual Vdd and Multi Vth Level Converter**” 9-21 May 2016 pp. 7479-7488.

11. Published in COMMUNICATION, NETWORKS AND COMPUTING-2018 on “**A High Performance BPSK Trans Receiver Using Level Converter for Communication Systems**”.Springer Series Journal.CNC-2018.

#### **Workshops/ Faculty Development Programs attended:**

##### **Workshops Attended:-**

1. Attended a two days workshop on DSP Processors and its Applications held during 17th and 18th february, 2006 at T.K.R College of Engineering and Technology, Hyd..
2. Attended a two days workshop on **CMOS VLSI & ASIC Design** held during 10th and 11th August, 2007 at JNTU College of Engineering & Technology, Hyderabad
3. Attended a four days workshop on **VLSI Design & Testing using Tanner Tools** held during 18th to 21 th February, 2008 at Aurora’s Technological Research Institute, Hyd.
4. Attended a two days National workshop on **Embedded Systems Design** held during 04th and 05th August, 2008 at T.K.R College of Engineering and Technology, Hyd.
5. Attended a three days workshop on **Analog & Mixed Signal Design** held during 19th to 21th August, 2009 at JNTU College of Engineering & Technology, Hyderabad.
6. Attended a two day course on Model based design for **Embedded systems** at Hotel Taj Krishna organized by Cranes Software Solutions. India.
7. Attended a two week AICTE Sponsored Faculty Development Programme on **Advanced VLSI Design** at Geetanjali College of Engineering & Technology from 17.06.2013 to 29.06.13.
8. Attended a 5 day Faculty Development Programme on **Instructional Design & Delivery** from 03.12.2013 to 07.12.2013 at ACE Engg College, Ghatkesar.
9. Attended **3rd Research Methodology** Course at JNTU, Hyderabad from 16.12.2013 to

21.12.2013.

10. Attended a Two days National workshop on “**CMOS VLSI & ASIC DESIGN USING CADENCE TOOLS**” on 28th 29th January 2014 at ACE Engg College, Ghatkesar,Hyd.

11. Attended a Four Day workshop on "**Mixed Signal IC Design**" at **Anurag Group of Institutions** during 28 July to 31 July 2015.

12. Attended a Two day FDP on "**Analog & Digital Circuit Design using Cadence Tools** at MVSR Engg College,Hyd during 12-13 January 2016.

13. Attended a Two Week FDP on "**CMOS Mixed Signal and Radio Frequenc VLSI Design**" during 26.12.2016 to 04.02.2017 at VITS,IITKHP.1

14. 5 Days online STTP"**MATLAB based Teaching-Learning in Mathematics,Science & Engineering**" Ramrao Adik Institute of TEchnology,Navi Mumbai.18th to 22nd May 2020.

15.5 Day Online FDP on "Advanced Python Programming using Django" Malineni Lakshmaiah Women's Engineering College,Guntur21-25th May 2020.

16.5 Day Online FDP on "Innovative Trends in Data Analysis with AI" Malineni Lakshmaiah Women's Engineering College,Guntur 26-30th May 2020

#### **Workshops Conducted:-**

1. Organized a two day workshop on **Digital Signal Processors and its Applications** held during 17th and 18th February, 2006 at T.K.R College of Engineering and Technology, Hyderabad.
2. Organized a two days National **workshop on Embedded Systems Design** held during 04th and 05th August, 2008 at T.K.R College of Engineering and Technology, Hyderabad.
3. As a Coordinator organized the **National Paper Presentation “Prathibha”** held during the months of February and September in the years 2005, 2006,2007,2008,2009 held at T.K.R College of Engineering and Technology, Hyderabad.
4. Organized a two day workshop on **Latest Advances in Electronics and Communication Systems** on 1<sup>st</sup>, 2nd March 2013 at TKRCET.
5. Organized a Two days National workshop on **CMOS VLSI & ASIC DESIGN USING CADENCE TOOLS** on 28th ,29th January 2014 at ACE Engg College,Ghatkesar,Hyd.
6. Organized a Two days National workshop on **VLSI DESIGN USING Mentor Graphics** during

October 2019 at ACE Engg College,Ghatkesar,Hyd

**NPTEL CERTIFICATE:**

Attended 12 week FDP on "Digital Electronic Circuits" during JAN-APR 2019.

**Projects guided:**

1. B.Tech – 40
2. M.Tech- 15

**Memberships in Professional Bodies:**

1. LMISTE

**Additional Responsibilities in the Department:**

1. In-charge of First Year.
2. FDP/STTP Coordinator of ECE Dept.
- 3.NBA Work Criteria 5.
- 4.Mentor for 3 year 20 students
- 5.VLSI & ECAD Lab Incharge.
- 6.Anti Ragging Incharge Coordinator

**Books Published:-**

1. " **Audio and Video Systems**" for Diploma IV sem ECE under VGS Publishers.
2. "**Digital Electronics and Microcontrollers**" for Diploma IV sem EEE under VGS Publishers.
3. " **Microcontrollers**" for Diploma VI sem ECE under VGS Publishers.
4. "**Digital Electronics and Microcontrollers**" for Diploma V sem EEE under VGS Publishers

**Patent:-** Effective Management Analysis of Signal Coverage and Novel design of Traingular Patch Antenna for Quasi Elliptic Band Pass Response.

**Resource:Indian Patent Advaced Search System Publication dated 29.05.2020**