



Newsletter

Volume 2, Issue 2, July 2015

Department of Electronics & Instrumentation Engineering
(Accredited by NBA, New Delhi)

KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE

Warangal-506 015, Telangana, INDIA (An Autonomous Institute under Kakatiya University, Warangal)

కాకతీయ సాంకేతిక విజ్ఞాన శాస్త్ర విద్యాలయం వరంగల్ - ౫౦౬౦౧౫.

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E&I Association Calendar for I Semester	
Date	Activities
09.07.2015	Inaugural Ceremony
16.07.2015	Express to Impress
23.07.2015	Concepts (A Technical quiz)
30.07.2015	Carrier guidance (Guest lecture)
06.08.2015	Debate
13.08.2015	Alumni talk hour (Guest Lecture)
20.08.2015	Brief details on project works
27.08.2015	PPT on trends in instrumentation
03.09.2015	Puzzle test
10.09.2015	Information on various learning channels
17.09.2015	Group Discussion
24.09.2015	Discussion on Parikaran 2015 Events.

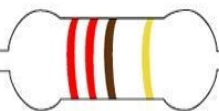
Dept. of E&IE , KITSW 2011 - 2015 Batch





Our Basic Electronics Lab. Assistant Sri M. Venu Gopal retired on 31.01.2015.
We wish him Happy Retirement Life.

HOW TO READ A



RESISTOR

Hold the resistor with the lonely stripe (usually shiny) to the right.

Now read the stripes from left to right:
The first two stripes stand for digits of a number, and the third stripe stands for the power of ten by which to multiply that number. The lonely stripe represents the margin of

For example:

Stripe one: red = 2 Stripe two: brown = 1
Number to multiply = 21
Stripe three (multiplier): orange = x1000
Resistor value = 21 x 1000 = **21 KΩ**

	Digit Value	Multiplier Value	Quality Value
None			± 20%
Silver	.01		± 10%
Gold	.1		± 5%
Black	0	0	
Brown	1	10	± 1%
Red	2	100	± 2%
Orange	3	1000	
Yellow	4	10000	
Green	5	100000	
Blue	6	1000000	
Purple	7	10000000	
Grey	8		
White	9		

03

THE FUTURE OF THE HARD DRIVE

As the need for high-capacity storage increases, scientists are trying to find ways to fit more hard drive platters into the same space, increasing the amount of information that can be stored on a single drive.

NEW HARD DRIVE TECHNOLOGIES



HELIUM-FILLED DRIVES

Removes the friction and fluttering of platters as they spin at high speed, allowing drives to fit more platters in a given space.



SHINGLED MAGNETIC RECORDING (SMR)

The tracks of a drive overlap like shingles on a roof, allowing a hard drive to have more tracks (and thus, more data).



HEAT-ASSISTED MAGNETIC RECORDING (HAMR)

Allows data to be written more compactly by raising the temperature of the material that can be read by a magnetic field.

>> 2013

Western Digital experiments with helium-filled drives, which could offer a capacity of

5.6 TB

>> 2014

Seagate's SMR technology is predicted to allow hard drives to reach capacities of

5 TB

>> 2020

Seagate's HAMR technology is predicted to allow hard drives to reach capacities of

20 TB

Faculty Publications

1. T. Swapna, **K. Sivani**, K.Kishan rao, "Outage Probability Analysis of Two Relay Decode and Forward Cooperative Communications" International Conference on Communication and Signal Processing, April 2-4, 2015, Madras India.
2. T. Swapna, **K. Sivani**, K.Kishan rao, " Performance Limit of Dual Hop Relaying Systems" International Conference on Innovations in Information Embedded and Communication Systems-2015 (ICIIECS), 19–20 March 2015, Coimbatore, India.
3. Ch. PavanKumar, G. Chandana, **K. Sivani** "Kogge-Stone and Knowles Adders for High Speed and Reduced Area" in proc. Of National Conference on Recent Advances in Communications & Electronics (RACE-2015) held during 27th -28th February, 2015 at Kamala Institute of Technology & Science, Singapur, Telangana, India.
4. E. H. Krishna, **K. Sivani** and K. A. Reddy, "OFDM Channel Estimation and Equalization Using Multi Scale Independent Component Analysis," in *Proc. Of IEEE International Conference on Signal Processing, Informatics, Communication and Energy Systems (IEEE SPICES)*, Kozhikode, India, 19-21, February, 2015.
5. E. H. Krishna, **K. Sivani** and K. A. Reddy, "Hardware Implementation of OFDM Transceiver using FPGA," in *Proc. Of IEEE International Conference on Computer and computational Sciences (ICCCS)*, Greater Noida, Ghaziabad, India, 27-29, January, 2015.
6. E. H. Krishna, **K. Sivani** and K. A. Reddy, "FPGA implementation of Secure image Compression with 2D-DCT using Verilog HDL" at *International conference on Devices , Circuits and Systems, ICDCS'14* , Karunya University, Coimbatore.
7. Ch. Sravan, Ch.Pavankumar, **K. Sivani** "A novel approach for power-gating technique with Improved Efficient Charge Recovery Logic" in proc. Of International Conference on Smart Electric Grid (IEEE ISEG), 2014, vol., no., pp.1,8, 19-20 Sept. 2014 doi: 10.1109/ISEG.2014.7005583.
8. Ch. Sravan, Ch. Pavankumar, **K. Sivani** "A Novel Approach for Power Reduction in Asynchronous circuits by using AFPT" in proc. Of Eleventh International Conference on Wireless and Optical Communications Networks (IEEE WOCN), 2014, vol., no., pp.1-7, 11-13 Sept. 2014,doi: 10.1109/WOCN.2014.6923091.
9. **Nirmala Devi Rangisetty** & Tara Saikumar "Application of Radon Transform for image segmentation on Level Set Method Using HKFCM Algorithm" *International Conference and Annual Convention on Emerging ICT for Bridging Future, " 12-14th Dec, 2014.*
10. C. Bala Rama Krishna, **R. Nirmala Devi**, S. Vishwa Prasad Rao and P. S. Rama Chandra Rao "Stability Analysis Of A Class Of Boundary Value Problems" International e-Journal of Mathematics and Engineering 246 (2014) PP.2414 – 2425 ISSN 0976 – 1411
11. **R. Nirmaladevi** & Vanga Mahesh "Design and Characterization of Efficient Parallel Prefix Adders using FPGAs" International Journal of Engineering Research & Technology ISSN 2278- 0181 In IJERT, Volume. 3, Issue. 09 , September – 2014
12. **Anjaneyulu O**, Veena A, Shravan Ch, Krishna Reddy C.V "Self Driven Pass Transistor based Low-Power Pulse Triggered Flip-Flop Design" *International Conference -IEEE-SPACES 2015*, p.p. 22-28, DOI: 10.1109/SPACES.2015.7058266, 2-3 Jan, 2015
13. **K. Srinivas** and L.Ram gopal Reddy, "Reduced data dualscale entropy analysis of HRV signals for improved congestive heart failure detection", *Measurement Science Review*, Vol.14, No.5 pp 294-301, Oct 2014. **Impact Factor-1.162**, DOI: 10.2478/msr-2014-0040, ISSN: 1335-8871
14. **K. Srinivas** and L. Ram Gopal Reddy, "An efficient and automatic systolic peak detection algorithm for Photoplethysmographic signals" *International Journal of computer Applications*, Vol.97, No. 19, July 2014, DOI: 10.5120/17115-7686; ISSN: 0975-8887 ISBN: 973-93-80882-79-1.
15. **K. Shailaja**, S. Prathyusha, "Design of a Hybrid Adder using QCA " *International Journal of VLSI System Design and Communication System*, ISSN-2322- 0929,Vol.02, Issue .07,October 2014, page no-0593-0596.

List of students placed on campus in the academic year 2014-15

S. No.	Roll No.	Name of the Student	Name of the Company
1.	11016T0604	Thammadi Sidharth	Computer Science Corporation,
2.	11016T0619	Ailoni Manasa	Hcl Comnet-2015
3.	12016T0668L	Dheekonda Aravind Krishna	Global Step
4.	11016T0601	Bojanapalli Premaja	TCS, Hyderabad
5.	11016T0602	Nalubola Amulya	TCS, Hyderabad
6.	11016T0605	Bollam Varun Raj	Aurobindo Pharma Ltd
7.	11016T0605	Bollam Varun Raj	TCS, Hyderabad
8.	11016T0606	Kamireddy Sravani Reddy	TCS, Hyderabad
9.	11016T0613	Nalla Suhas Reddy	TCS, Hyderabad
10.	11016T0614	Garrepally Mounika	Computer Science Corporation
11.	11016T0615	Pokala Srija	TCS, Hyderabad
12.	11016T0617	Tenneti Neeharika	TCS, Hyderabad
13.	11016T0618	Motla Sushma	Value Labs
14.	11016T0629	Kambhampati Adithya	TCS, Hyderabad
15.	11016T0631	Samudrala Mounika	Computer Science Corporation
16.	11016T0633	Madarapu Srujana	Computer Science Corporation
17.	11016T0641	Bommineni Shyamsunder	TCS, Hyderabad
18.	11016T0644	Banoth Rajkumar	Aurobindo Pharma Ltd
19.	11016T0653	Devireddy Revanth Reddy	Aurobindo Pharma Ltd
20.	11016T0656	Velamuri Nitesh Bharadwaj	TCS, Hyderabad

M. SUSHMA
M/s. Value LabsT. SIDHARTH
M/s. CSCG. MOUNIKA
M/s. CSCS. MOUNIKA
M/s. CSCM. SRUJANA
M/s. CSCA. MANASA
M/s. HCL ComnetB. RAJKUMAR
M/s. Aurobindo
Pharma Ltd.B. VARUNRAJ
M/s. Aurobindo
Pharma Ltd.D. REVANTH REDDY
M/s. Aurobindo
Pharma Ltd.

Nalla Suhas

GRE / IELTS / TOEFL scores

S. No.	Name of the Student	Roll Number	GRE / IELTS/ TOEFL	Detailed Scores
1.	11016T0620	G. Aravind Siddhartha	GRE	297
2.	11016T0609	V. Rashmika	GRE	301
3.	11016T0602	Nalubola Amulya	GRE	298
4.	11016T0630	Vallam Akhildeep	GRE	283
5.	11016T0659	Racharla Amarnath	GRE	302
6.	11016T0608	Md. Anief Pasha	GRE	303
7.	11016T0620	G. Siddhartha	TOEFL	79
8.	11016T0609	Veerareddy Rashmika	TOEFL	81
9.	11016T0602	Nalubola Amulya	TOEFL	84
10.	11016T0620	G. Siddhartha	IELTS	6.0
11.	11016T0630	Vallam Akhildeep	IELTS	6.5